

METEOROLOGICAL TABLES.

[Prepared by the Division of Records and Meteorological Data.]

Table I gives, for 140 Weather Bureau stations making two observations daily and for 10 others making only the 8 p. m. observation, the data ordinarily needed for climatological studies, viz., the monthly mean pressure, the monthly means and extremes of temperature, the average conditions as to moisture, cloudiness, movement of the wind, and the departures from normals in the case of pressure, temperature, and precipitation.

The stations are arranged in geographical or climatological divisions, for each of which the mean temperature and average precipitation for the month are also given, together with their departures from normal values.

Generally the headings of the several columns are sufficiently explicit as to the data underneath.

The mean pressure is based on the 8 a. m. and 8 p. m. simultaneous observations. Mean values thus computed differ from the mean of the 24 hourly readings by amounts varying from zero to 0.02 of an inch; the departures east of the ninetieth meridian are generally above the mean of 24 hourly readings and those west of that meridian are generally below. A comparison for each individual station can readily be made in connection with the data given in Table VI.

The pressures have been reduced to sea level by the empirical method published by Prof. H. A. Hazen in Signal Service Professional Paper No. VI, which, however, has been further modified for a few special stations.

The mean temperature of the dew point and the mean relative humidity are based on daily observations of the whirled psychrometer at 8 a. m. and 8 p. m.

The maximum wind velocities given in the table are the velocities as read from the sheets of the register for any 5-minute period in the 24 hours, midnight to midnight, seventy-fifth meridian time.

The number of clear and cloudy days and the average cloudiness are based upon numerous personal estimates by the observer during the daytime and do not relate to the nighttime.

When these personal estimates give from 0 to 3 cloudiness, on a scale of zero to ten (0—10), the day is classed as clear; 4 to 7, partly cloudy; and 8 to 10, cloudy.

Table II gives, for about 2,200 stations occupied by voluntary observers, the extreme maximum and minimum temperatures, the mean temperature deduced from the average of all the daily maxima, and minima, or other readings, as indicated by the numeral following the name of station; and the total monthly precipitation.

For the sake of uniformity the monthly mean temperature has been deduced from readings of self-registering maximum and minimum thermometers whenever practicable. Formerly the means obtained by the use of observations at 7 a. m., 2 and 9 p. m. were printed in this table, whenever given, in preference to those deduced from the daily extremes.

These stations are arranged alphabetically by States, and their reports are generally received through the co-operation of the respective State Weather Services. The voluntary stations in the Republic of Mexico and those in the West Indies are included in this list for convenience of tabulation.

Table III gives, for about 30 Canadian stations, the mean pressure, mean temperature, total precipitation, prevailing wind, and the respective departures from normal values. Reports from Newfoundland and the Bermudas are included in this table for convenience of tabulation.

The mean pressures and temperatures here given are based

upon observations made simultaneously for telegraphic purposes at 8 a. m. and 8 p. m., seventy-fifth meridian time; the pressures have been reduced to sea level by the Weather Bureau method and, therefore, differ slightly from those reduced by the method employed by the Canadian Meteorological Service.

Table IV gives for 36 stations the percentages of hourly sunshine as derived from the automatic records made by two essentially different types of instruments, designated, respectively, as the thermometric recorder and the photographic recorder. The kind of instrument used at each station is indicated in the table by the letter T or P in the column following the name of the station.

The thermometric recorder operates on the principle of a Leslie differential air thermometer, one of the bulbs being blackened. It is fully described in the "American Meteorological Journal," Vol. IX, pp. 345-349. The record is produced electrically. Whenever the intensity of the sunshine surpasses a certain minimum limit and the heating action on the blackened thermometric bulb is sufficient to cause a mercurial column to rise above the upper of two platinum wires the recorder will be put in electrical communication with the register. By means of the clock driving the record sheet the electrical circuit is closed momentarily once each minute, causing a succession of minute marks on the record sheet. The intensity of sunshine above this limit is not recorded. The instrument is adjusted by trial and observation so that a record will just be made when the cloudiness is not sufficient to quite obscure the disk of the sun. Denser cloudiness than this, so that the exact form of the sun's disk can not be seen with the unaided eye, will cause an interruption of the record.

The photographic recorder operates on the principle of Jordan's recorder. The record sheets for this instrument are sensitized each month with the ordinary blue-print solution, and are generally used only for a period of fifteen days, a new sheet being then introduced, but the instrument can be used for a whole month's record without changing the sheets.

Neither of these instruments will record satisfactorily the duration of the sunshine for about one hour after sunrise and one hour before sunset and, on this account, it has been considered necessary to apply to the recorded hours of sunshine what has been designated a "twilight correction." The amount of this correction is found from a table of the time of sunrise and sunset, noting, in connection therewith, the time of beginning and ending of sunshine on the automatic record. This correction is applied when we know, by personal observation, the comparative clearness of the sky at the time of sunrise or sunset, as the case may be.

Although the action of the thermometric recorder is based on the heating effect of the sun's rays, while that of the photographic recorder is based on the actinic effect, it is found there is not a very great difference between the two instruments. In general, however, the photographic recorder does not give such good results at stations where rain is more or less frequent and with comparatively high relative humidities, since under these conditions the sensitized paper deteriorates.

Although the thermometric recorders are regulated by standard eastern time, and the photographic recorders by a sun dial or local apparent time, yet the readings from the record sheets are adjusted to local mean time. The last column gives the percentage of sunshine deduced by taking

the complement of the local observer's estimate of cloudiness, which latter is published in Table I.

Table V gives for 79 stations the mean hourly temperatures deduced from thermographs of the well-known pattern manufactured by Richard Bros., Paris, described and figured in the report of the Chief of the Weather Bureau, 1891-'92, p. 29. These instruments are placed in the standard shelter with other thermometers, and are checked twice daily, for time errors and for agreement with the standard whirled thermometer.

In transcribing the hourly values, the readings of the dry-bulb thermometer of the whirled psychrometer at 8 a. m. and 8 p. m. are adopted as the standard of reference, and these standard readings are given in the appropriate columns of Table V. Corrections for intermediate hours, interpolated from the known differences at 8 a. m. and 8 p. m., are applied to the curve throughout the twenty-four hours, thus making it conform as closely as practicable to the indications of the standard mercurial thermometer. The averages given in this table are, therefore, those of the standard dry thermometer at 8 a. m. and 8 p. m., and the corrected thermograph reading for intermediate hours.

In general the magnitude of the corrections applied is about 1° Fahrenheit, although a number of instruments accord with the standard dry thermometer within less than a degree.

As has been noted elsewhere, the greatest differences are those between the daily extremes registered by thermographs and by standard self-registering maximum and minimum thermometers, respectively.

Table VI gives for 68 stations the mean hourly pressures (seventy-fifth meridian time) as automatically registered by barographs of the pattern manufactured by Richard Bros., Paris, except for Washington, D. C., where Foreman's barograph is in use. Both instruments are described in the Report of the Chief of the Weather Bureau for 1891-'92, pp. 26 and 30.

The readings of the mercurial barometer at 8 a. m. and 8 p. m., seventy-fifth meridian time, corrected for temperature and instrumental error, are used as a means of checking and correcting the barograph curve, in the same manner as described in the table of temperature means, and are those given in this table.

The corrections applied to the individual hourly barograph readings vary in magnitude. The average is about 0.02 of an inch, while in extreme cases it may be 0.06 or 0.08 of an inch, depending somewhat on the individual skill of the observer in keeping the instrument in adjustment.

The means have not been reduced to sea level, neither has a correction to reduce to standard gravity been applied.

Although the mean pressures are given in this table to the nearest thousandth of an inch, yet it is probable that these figures still need appreciable systematic corrections, therefore, as in the case of so many other similar European series, caution should be exercised in using them for the investigation of diurnal periodicities of pressure. The adopted process of reduction to the standard mercurial barometer prevents the accumulation of any progressive error, whether due to the time scale or to the vacuum box, but does not inform us of any periodic errors that may have occurred within the 12-hour periods. On this latter point we have only the little knowledge that is given to us by a general investigation into the effect of temperature on these aneroids. In this respect Prof. Marvin's experiments have shown that, although the manufacturer has introduced a compensation for temperature (presumably by introducing some air into the vacuum box), yet this result has not always been per-

fectly satisfactory. Several aneroids have been found to show higher pressures when the instrumental temperature rises, while others do the reverse. In a number of cases a rise of 10° F., in the instrumental temperature produces a fall of 0.010 or 0.015 of an inch in the recorded pressure.

In general, it is safe to assume that any one of the Richard barographs at Weather Bureau stations is liable to a temperature correction of this amount, although the average of several instruments would undoubtedly be much smaller. Since the highest temperature, and, therefore, the largest plus or minus correction for temperature, generally occurs some time after the 8 a. m. reading, and *vice versa*, the lowest temperature with the largest minus or plus correction occurs before the 8 a. m. reading; therefore, there is introduced into every daily barograph record an error that will be either positive between 8 p. m. and 8 a. m., and negative between 8 a. m. and 8 p. m., or *vice versa*. The average amount of the maximum value of this error for a month, varying as it does with the temperature of the room in which the aneroid is kept, may easily amount in the winter season to 0.02 of an inch, but when station barometers are located in large buildings of uniform temperature the limit will diminish. It is evident, therefore, that these hourly means can not be used for determining by the harmonic analysis the shorter and smaller periodicities, although they sometimes give the semi-amplitude of the principal simple daily component to within 0.01 of an inch, or less. To this extent, therefore, these may be cautiously used in the study of both the geographical and chronological distribution of this first component, a study whose importance undoubtedly warrants the preparation and publication of this table from month to month. Some of the results of such studies will be published in subsequent numbers of this REVIEW.

Table VII gives for 142 stations the arithmetical means of the hourly movements of the wind ending with the respective hours, as registered automatically by the Robinson anemometer, in conjunction with an electrical recording mechanism, described and illustrated in the Report of the Chief of the Weather Bureau, 1891-'92, p. 19. No corrections have been applied to reduce the registered velocities to true velocities.

In studying the diurnal variations of wind movement, the following facts should be kept in mind. In graduating the dials of the various sizes of Robinson anemometers, it has been assumed by the makers that the centers of the cups move only one-third as fast as the wind, although numerous experiments have demonstrated that cups and arms of various proportions require different formulæ and tables of reduction even in perfectly steady motion. Prof. Marvin has further shown that for ordinary gusty winds, when the anemometer cups rapidly vary their rate of rotation, the moment of inertia of the revolving parts is a most important factor. The instruments having the least inertia record most truly, and those having large inertia exceed these in proportion as the gusts are stronger, consequently, the anemometer records are liable to be too large in the gusty winds of the daytime as compared with the more steady winds of nighttime. No correction for this inertia error has been determined, nor can be, unless we have simultaneous records with two anemometers having different moments of inertia; therefore, the apparent diurnal variations of wind velocity include a slight inertia error which is probably periodic in character between the winds of daytime and nighttime.

While we must regard the gustiness of the ordinary wind, that is, its sudden and momentary fluctuations of velocity, as highly variable, yet in practical anemometry we can not do more than make an average allowance for its effects upon an anemometer.

For the ordinary gusty winds of the free atmosphere Prof.

Marvin adopts the following equation expressing the relation between the motion of the cups and the velocity of the wind at any moment:

$$\text{Log. } V = 0.509 + 0.9012 \log. v;$$

where V is velocity of wind in miles per hour and v is the linear velocity (also in miles per hour) of the cup centers. This equation applies strictly to anemometers that have 4-inch hemispherical brass cups on arms 6.72 inches long, whose revolving parts weigh about 590 grams (22 ounces) and have a moment of inertia of about 50,000 C. G. S. units.

This equation has been deduced from comparative observations in the open air of anemometers whose behavior in steady velocities on the whirling machine had been previously studied. The recognition thus given the important effects of inertia enables us to say that by applying this formula, or the following equivalent table, we partly annul the influence of the inertia of brass anemometers used by the Weather Bureau.

The following table gives the corrected velocities corresponding to observed velocities up to 90 miles per hour. The tabular values corresponding to indicated velocities greater than 60 miles per hour are uncertain, as direct experiments were not made at the higher velocity:

Wind velocities, as indicated by Weather Bureau anemometer, converted to true velocities (in miles per hour).

Indicated velocity.	0	1	2	3	4	5	6	7	8	9
0.....	.....	.....	.....	.....	.....	5.1	6.0	6.9	7.8	8.7
10.....	9.6	10.4	11.3	12.1	12.9	13.8	14.6	15.4	16.2	17.0
20.....	17.8	18.6	19.4	20.2	21.0	21.8	22.6	23.4	24.2	24.9
30.....	25.7	26.5	27.3	28.0	28.8	29.6	30.3	31.1	31.8	32.6
40.....	33.3	34.1	34.8	35.6	36.3	37.1	37.8	38.5	39.3	40.0
50.....	40.8	41.5	42.2	43.0	43.7	44.4	45.1	45.9	46.6	47.3
60.....	48.0	48.7	49.4	50.2	50.9	51.6	52.3	53.0	53.8	54.5
70.....	55.2	55.9	56.6	57.3	58.0	58.7	59.4	60.1	60.8	61.5
80.....	62.2	62.9	63.6	64.3	65.0	65.8	66.4	67.1	67.8	68.5
90.....	69.2	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table VIII gives the resultant movements of the winds for 68 stations of self-registration as deduced from the continuous record for every hour of the month. The contents of the columns are as follows:

Column 1—the name and number of the station, the latter

being the same as in tables I and IX for convenience of reference. Columns 2 and 3—the direction and duration of the prevailing wind, viz., that observed most frequently. Columns 4 and 5—the total movement in all directions for the whole month and the average hourly movement corresponding thereto. Column 6—the resultant direction, assuming the wind to have always a uniform velocity. Column 7—the duration in hours of this resultant direction, considered as a wind that has blown with the average velocity. Column 8—the approximate average hourly velocity in this resultant direction, found by dividing the resultant movement of column 10 by the resultant duration of column 7. Column 9—the direction of the resultant movement, computed by using the miles actually traveled each hour, as read from the registers. Column 10—the amount of the resultant movement in miles. Column 11—the azimuth of the resultant movement minus the azimuth of the resultant direction; these azimuths are counted around the circle from zero at the south through 90° at the west, and if the azimuth of the resultant movement is greater than that of the resultant direction, the difference in column 11 is called positive; the azimuth of the movement is equal to that of the direction plus the positive, or minus the negative differences. Column 12—the ratio of the resultant movement in column 10 divided by the total movement in column 4; this ratio would be unity in the ideal case of wind blowing from one direction only, but would be zero in the ideal case of equal opposing winds.

Table IX gives for 140 stations, or all that make observations at 8 a. m. and 8 p. m. (seventy-fifth meridian time), the four component directions and the resultant directions based on these two observations only and without considering the velocity of the wind in miles. The total movement for the whole month, as read from the dial of the Robinson anemometer, is given for each station in Table I. By adding the four components for the stations comprised in each geographical division one may obtain the average resultant direction for that region. From these resultant directions one may pass to the resultant movement, at least approximately, by applying the average corrections indicated by column 11 of Table VIII.

TABLE I.—Climatological data for Weather Bureau Stations, March, 1894.

Districts and stations.	Elevation above sea-level, feet.	Length of record, years.	Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.						Humidity and precipitation.						Wind.				Mean temperature data since opening of station.													
			Mean pressure, g. a. m. and 8 p. m. + .2	Mean reduced.	Departure from normal.	Mean max. and min. + .2	Maximum.	Date.	Mean maximum.	Minimum.	Mean minimum.	Greatest daily range.	Mean temp. of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Days with .01 or more.	Total movement, miles.	Prevailing direction.	Miles per hour.	Maximum velocity.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenth.	Highest for month.	Lowest for month.	Year.							
						Mean max. and min. + .2	Maximum.	Date.	Mean maximum.	Minimum.	Mean minimum.	Greatest daily range.	Mean temp. of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Days with .01 or more.	Total movement, miles.	Prevailing direction.	Miles per hour.	Maximum velocity.	Date.													
<i>New England.</i>																																		
Eastport	76	21	29.93	30.02	+ .14	33.4	4.8	51	19	38	13	28	29	20	25	73	1.69	- 2.6	1.19	- 3.8	14	8,173	SW.	42	n.w.	19	4	15	12	6.5	33.4	*	22.8	1885
Portland	103	23	29.91	30.02	+ .10	36.7	5.7	59	19	44	14	27	30	31	30	78	1.97	- 1	1.1	11	5,699	S.	28	se.	23	7	16	8	5.5	38.8	1878	23.2	1872	
Northfield	872	8	29.08	30.06	+ .08	34.0	8.7	66	19	43	5	27	25	36	27	79	1.06	- 2	2.3	13	8,177	S.	39	n.	19	7	12	6	4.5	34.0	1804	21.1	1867	
Boston	125	24	29.93	30.07	+ .12	42.5	7.9	70	* 19	50	20	27	35	26	31	69	1.01	- 3	1.4	10	8,964	w.	36	w.	16	6	5	8.9	42.5	1804	26.6	1872		
Nantucket	14	8	30.08	30.09	+ .14	39.3	4.9	52	7	44	22	27	34	16	34	81	1.89	- 2	2.0	10	8,778	n.	34	n.w.	14	11	13	7	5.3	39.3	1894	32.4	1888	
Woodstock	16	.....	.....	.....	.....	39.5	3.7	53	7	45	22	27	34	17	1.81	- 3	2.0	12	11,216	sw.	47	n.w.	14	8	18	5	5	44.0	51878	31.6	1888		
Vineyard Haven	S	.....	.....	.....	.....	43.0	6.8	60	7	50	22	27	36	25	20	2.15	- 1	1.9	10	10,553	n.w.	42	n.w.	14	11	15	5	5	43.0	39.8	1894	29.8	1885
Block Island	27	14	30.07	30.10	+ .14	39.8	4.8	58	22	45	22	27	34	19	34	83	1.97	- 2	2.4	13	9,19	s.	39	.....	19	1	11	11	3	39.4	1894	26.9	1885
Narragansett Pier	12	.....	.....	.....	.....	56.1	1.1	12	* 46	15	27	32	24	20	1.97	- 2	2.4	13	1.97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Haven	107	22	29.97	30.09	+ .10	41.4	7.0	65	19	50	19	27	33	26	33	78	1.05	- 3	3.6	9	6,209	s.	39	n.w.	14	5	21	5	6.0	43.4	1878	26.9	1885	
New London	45	24	30.07	30.12	+ .14	46.4	6.5	63	22	48	18	27	33	23	32	76	2.07	- 2	2.9	17	5,606	n.w.	32	n.w.	14	13	8	10	5.3	41.5	1878	26.7	1872	
<i>Mid. Atlantic States.</i>						47.4	6.6	65	22	48	18	27	33	23	32	76	1.58	- 2	2.9	17	5,606	n.w.	32	n.w.	14	13	11	7	4.4	38.5	1894	30.8	1885	
Albany	85	21	30.00	30.10	+ .11	39.8	5.7	68	75	19	48	17	27	31	28	30	73	0.85	- 2	1	14	6,764	s.	33	w.	14	7	14	10	5.9	39.8	1894	23.1	1885
New York, N. Y.	185	24	29.91	30.11	+ .11	44.5	7.3	69	53	20	27	36	31	34	72	1.09	- 2	2.4	12	7,745	n.w.	36	n.w.	14	8	13	9	4.4	45.4	1894	29.8	1872		
Harrisburg	377	b	29.71	30.13	.....	44.1	.....	75	22	53	19	27	36	30	35	73	1.39	- 2	2.4	13	5,571	w.	36	n.w.	14	13	9	9	4.5	44.1	1894	33.0	1892
Philadelphia	117	24	30.00	30.12	+ .10	47.0	4.0	80	77	26	21	27	38	29	35	69	1.45	- 1	1.7	10	7,620	n.w.	36	n.w.	14	12	8	11	5.1	44.0	1894	31.4	1885	
Atlantic City	53	21	30.07	30.12	+ .12	44.0	+ 6.2	77	22	50	19	27	38	27	38	82	1.39	- 2	2.5	11	8,607	sw.	42	n.w.	14	11	7	13	5.4	44.0	1894	31.4	1885	
New Brunswick	.....	.....	.....	.....	.....	42.9	.....	71	19	53	18	1	33	35	35	.....	1.74	- 2	2.4	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baltimore	179	24	29.92	30.12	+ .09	48.2	6.1	82	22	57	20	27	39	35	34	63	1.19	- 2	2.9	8	5,872	n.w.	37	w.	14	13	11	7	4.4	34.9	1878	35.3	1885	
Washington, D. C.	112	24	30.02	30.14	+ .10	48.5	7.1	83	22	58	20	27	35	36	35	66	0.98	- 2	3.2	7	5,504	n.w.	37	n.w.	14	15	6	10	6.0	49.4	1878	34.5	1885	
Cape Henry	20	.....	.....	.....	.....	50.6	5.5	85	23	59	26	27	42	35	35	.....	2.77	- 2	2.6	10	5,008	s.	28	n.w.	14	12	7	12	5.2	45.4	1878	39.4	1885
Lynchburg	685	23	29.41	30.16	+ .11	51.9	6.1	86	22	64	19	28	40	37	40	72	0.95	- 2	2.9	8	3,657	n.w.	26	n.w.	14	11	5	15	5.4	53.8	1878	39.0	*	
Norfolk	57	24	30.08	30.15	+ .11	52.5	5.5	88	22	62	24	27	43	32	44	81	2.04	- 1	1.6	11	6,028	n.s.	36	sw.	14	13	9	6	4.2	55.1	1871	40.6	1885	
<i>S. Atlantic States.</i>						68.9	5.3	83	22	67	20	27	45	31	40	63	1.04	- 3	3.7	8	6,061	sw.	32	n.w.	14	13	4	3	9.5	56.6	1894	45.3	1885	
Charlotte	773	21	29.31	30.14	+ .09	56.6	5.8	85	22	67	20	27	45	31	40	63	1.04	- 3	3.7	8	6,061	sw.	32	n.w.	14	13	4	3	9.5	56.6	1894	45.3	1885	
Hatteras	11	16	30.15	30.16	+ .12	55.6	5.9	75	22	61	21	27	50	21	50	86	3.12	- 3	3.3	9	10,099	s.	52	n.w.	14	13	10	8	4.5	56.1	1894	44.4	1885	
Kittyhawk	9	18	30.13	30.14	+ .10	51.8	4.2	82	23	60	26	27	44	30	45	82	2.05	- 3	3.9	11	10,237	sw.	43	n.	14	13	9	8	4.3	53.3	1878	41.7	1885	
Raleigh	388	8	29.73	30.16	+ .09	56.0	5.7	79	22	66	21	27	49	33	43	69	2.14	- 2	2.8	11	5,008	s.	28	n.w.	14	13	7	8	4.1	56.0	1894	45.2	1891	
Southport	34	19	30.14	30.17	+ .12	56.3	4.4	73	20	63	26	27	49	29	51	85	2.33	- 2	2.6	10	7,997	s.	38	n.w.	14	12	5	3.8	54.8	1878	45.8	1885		
Wilmington	78	24	30.05	30.17	+ .12	59.6	5.9	87	22	68	27	27	51	50	52	80	2.27	- 2	2.6	8	5,912	s.	29	w.	14	13	8	21	4	6.2	52.6	1871	45.8	1872
Charleston	52	24	30.14	30.18	+ .11	61.4	4.7	84	22	69	32	27	54	24	51	81	2.09	- 2	2.6	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbia	7	.....	.....	.....	.....	64.4	6.2	90	22	72	24	27	49	34	46	68	2.04	- 3	3.2	12	4,474	n.w.	36	n.w.	14	13	4	4	6.0	64.4	1894	47.6	1891
Atlanta	1,131	16	28.97	30.18	+ .08	56.7	5.2	82	22	67	19	27	47	34	42	66	2.99	- 3	2.2	11	7,574	n.w.	38	n.w.	14	13	6	3	4.0	57.0	*	47.9	*	
Pensacola	56	15	30.09	30.15	+ .05	61.8	1.3	79	21	68	29	26	55	24	55	81	7.52	- 2	1	10	7,575	se.	35	n.w.	14	13	8	9	4.7	55.4	1890	54.8	1885	
Mobile	57	24	30.10	30.16	+ .07	60.5	1.0	78	21	68	30	26	53	25	53	88	1.51	+ 1	1.4	14	7,195	s.	44	n.w.	14	13	9	5	5.5	55.1	1890	53.5	1895	
Montgomery	257	22	29.88	30.16	+ .07	66.6	3.1	86	* 71	25	27	50	36	48	70	4.84	2	1.2	11	4,864	s.	26	n.w.	14	13	7	5	6.6	62.6	1878	51.7	1885		
Meridian	358	23	29.75	30.14	.....	59.0	.....	85	* 70	23	27	48	40	50	79	5.34	2	1.0	15	5,837	s.	43	s.	20	14	7	4	3.3	.....	.....	.....	.....	.....
Vicksburg	254	23	29.83	30.10	+ .02	61.0	2.5	84	18	71	27	30	51	28	48	69	6.27	- 0	1.5	15	6,809	se.	28	n.w.	14	13	7	9	5.3	64.6	1878	52.8	1892	
New Orleans	54	24	30.07	30.13	+ .06	61.0	0.5	82	22	70	32	27	56	23	55	81	5.94	+ 0	3	13	7,778	se.	40	se.	20	14	9	8	4.6	67.9	1882	58.4	1885	
Port Eads	.....	.....	.....	.....	.....	62.2	2.2	82	22	68	41	20	55	20	20	86	3.15	2	1.6	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shreveport	249	23	29.80	30.06	+ .09	58.8	1.3	82	13	69	30	26	50	28	48	70	8.04	- 3	3.3	12	6,749	se.	54	n.w.	14	13	6	4	4.9	65.3	1878	52.7	1892	
Fort Smith	492	12	29.54	30.07	+ .03	53.8	2.2	84	13	65	20	26	43	38	42	65	6.82	- 4	3.0	19	6,237	e.	17	s.	15	12	6	3	4.5</					

TABLE I.—Climatological data for Weather Bureau Stations, March, 1894—Continued.

Districts and stations.	Elevation above sea-level, feet.	Length of record, years.	Pressure, in inches.	Temperature of the air, in degrees Fahrenheit.										Humidity and precipitation.					Wind.			Mean temperature data since opening of station.																							
				Mean pressure 8 a.m. and 8 p.m. + 2.		Mean reduced.		Departure from normal.		Maximum.		Mean maximum.		Minimum.		Date.		Mean minimum.		Greatest daily range.		Mean temperature of the dew-point.		Mean relative humidity per cent.		Precipitation, in inches, or more.		Total movement, miles.		Maximum velocity.		Prevailing direction.		Miles per hour.		Cloudy days.		Average cloudiness, tenth.		Highest for month.		Lowest for month.		Year.	
				Mean	Pressure	Mean	Reduced	Departure	From	Normal	Maximum	Date	Mean	Max.	Min.	Date	Mean	Min.	Max.	Range	Mean	Temp.	Dew	Point	Relative	Humidity	Days with 0.1 or more	Total	Movement	Velocity	Direction	Date	Cloudy	Avg. Cloudy	Days	Month	Year.	Year.							
<i>Up. Miss. Val.—Con.</i>																																													
Davenport.....	613	23	29.33	30.00	—	.86	43.4	+ 8.5	78	17	52	6	25	35	29	33	72	1.88	—	0.3	8	9,320	sw.	60	sw.	10	8	15	8	5.3	48.2	1878	28.7	1877											
Des Moines.....	869	16	29.04	30.00	—	.86	42.6	+ 7.6	81	17	53	7	25	33	34	30	67	1.78	+ 0.4	8	8,209	sw.	42	sw.	10	15	9	7	4.9	42.6	1894	28.8	1891												
Dubuque.....	651	21	29.27	29.99	—	.95	41.4	+ 8.2	78	17	52	8	25	32	34	32	73	3.06	+ 0.8	10	5,494	se.	34	w.	10	9	13	9	5.6	45.4	1878	26.7	1888												
Keokuk.....	613	23	29.34	30.01	—	.93	46.2	+ 8.3	79	21	56	9	25	36	34	34	73	2.52	+ 0.4	8	7,981	sw.	42	nw.	10	15	8	8	4.4	50.4	1878	31.1	1891												
Cairo.....	359	23	29.70	30.09	+	.95	52.4	+ 5.3	78	21	61	17	26	44	29	43	73	4.14	+ 0.3	9	8,293	s.	44	sw.	12	11	8	1	5.0	57.6	1878	42.5	*												
Springfield, Ill.....	644	15	29.34	30.05	—	.01	46.6	+ 6.7	79	21	56	8	25	37	31	34	68	3.09	+ 0.5	9	9,150	s.	36	s.	10	12	11	10	8	4.9	46.6	1894	33.8	1891											
Hannibal.....	534	29.44	30.03	—	.	47.4	—	81	21	57	12	25	36	34	34	66	1.77	+ 0.3	5	9,442	sw.	48	s.	10	11	10	10	5	5.2	52.1	1878	42.5	*											
Saint Louis.....	571	24	29.43	30.05	—	.01	51.2	+ 7.4	84	21	61	14	26	42	37	35	66	2.60	+ 0.4	7	10,156	se.	41	s.	10	18	5	8	3.6	53.9	1878	37.8	1872												
<i>Missouri Valley.</i>																																													
Columbia.....																																													
Kansas City.....	963	6	28.98	30.03	—	.04	47.8	+ 5.5	82	17	58	12	25	37	33	34	66	2.66	+ 0.6	8	9,025	sw.	36	sw.	10	15	7	6	3.5	45.4	1894	33.9	1891												
Springfield, Mo.....	1,356	9	28.59	30.04	—	.02	50.0	+ 5.0	82	17	60	13	26	49	32	34	62	3.62	+ 0.3	6	9,104	se.	36	s.	4	12	11	8	4.3	50.6	1892	39.5	1891												
Topeka.....	7																																												
Omaha.....	1,123	24	28.79	30.02	—	.07	43.0	+ 6.5	84	17	54	4	25	32	37	28	63	1.91	+ 1.3	4	.....	n.	.....	.....	.....	14	8	1	6	48.6	1894	35.0	1891								
Valentine.....	2,613	9	27.19	29.00	—	.10	30.2	+ 2.7	77	16	48	4	25	32	24	23	66	1.08	0.0	5	10,242	n.	48	sw.	21	6	9	6.1	44.0	1899	21.6	1891													
Sioux City.....	1,165																																												
Pierre.....	1,470																																												
Huron.....	1,310	13	28.52	29.93	—	.12	32.8	+ 4.8	79	16	46	6	25	22	47	24	75	1.18	+ 0.5	7	11,716	n.	58	s.	14	8	12	11	6.2	36.3	1899	19.2	1888												
<i>Northern Slopes.</i>																																													
Bear.....	2,477	14	27.27	29.99	—	.06	27.3	+ 2.1	62	29	38	—	17	25	17	49	17	67	0.64	0.0	6	7,737	sw.	53	nw.	14	7	18	6	5.6	39.6	1885	18.0	1893											
Miles City.....	2,374	17	27.47	30.01	—	.01	28.6	+ 2.8	62	16	38	3	25	20	34	22	80	4.03	+ 3.5	12	5,374	sw.	40	sw.	19	6	12	13	6.4	43.8	1878	15.8	1891												
Helena.....	4,118	14	25.71	30.05	—	.01	30.8	+ 3.2	62	29	39	0	5	22	31	18	63	0.80	+ 0.2	12	6,888	sw.	46	sw.	9	5	4	22	10	7.1	40.6	1885	23.2	*											
Rapid City.....	3,280	9	26.53	30.01	—	.01	33.5	+ 1.5	69	16	44	2	26	23	48	20	66	1.18	+ 0.2	8	9,271	n.	51	n.	22	1	20	10	6.7	39.8	1889	24.9	1888												
Cheyenne.....	6,105	24	23.88	30.07	—	.01	33.2	+ 1.8	63	12	44	4	28	22	41	20	62	0.93	+ 0.3	7	11,419	w.	48	w.	14	7	17	7	5.2	42.1	1887	25.7	1875												
Lander.....	5,377																																												
Kearney.....	2,206																																												
North Platte.....	2,841	20	27.00	30.04	—	.06	39.8	+ 2.8	77	16	54	7	25	26	50	24	62	1.72	+ 1.1	4	9,156	n.	44	dw.	10	5	23	3	5	24.4	1878	26.9	1888												
<i>Middle Slopes.</i>																																													
Colorado Springs.....	6,098	15	23.91	30.03	—	.	37.2	+ 2.3	70	12	50	6	22	25	46	13	45	0.44	+ 0.6	8	9,063	n.	66	nw.	10	8	16	7	5.0	44.2	1879	30.4	1875												
Denver.....	5,287	23	24.64	30.03	—	.03	40.2	+ 0.1	71	12	52	9	25	28	49	16	41	0.70	+ 0.2	7	6,491	sw.	36	nw.	10	9	15	7	5.1	40.0	1879	32.2	1891												
Pikes Peak.....	17																																												
Pueblo.....	4,734	6	25.16	30.00	—	.	43.2	—	75	12	57	11	22	29	51	13	39	0.24	+ 0.3	8	7,476	w.	48	n.	20	9	19	3	4.7	44.2	1889	35.8	1891												
Concordia.....	1,410	9	28.49	30.02	—	.09	45.8	+ 6.3	86	17	59	7	26	33	47	28	66	0.28	+ 1.7	8	3,842	s.	48	n.	17	6	10	10	4.0	45.8	1894	33.1	1891												
Dodge City.....	2,523	20	27.47	30.02	—	.03	46.1	+ 2.9	84	14	60	9	25	32	45	25	54	0.40	+ 0.4	4	10,635	sw.	45	lw.	10	16	13	13	2	3.8	48.8	1889	33.8	1891											
Wichita.....	1,366	6	28.55	30.04	—	.	49.0	—	80	16	60	13	20	35	39	31	58	0.72	—	4	9,176	w.	39	n.	28	15	10	10	3	3.9	49.0	1894	37.8	1891											
Oklahoma City.....	1,239	28.72	30.05	—	.	52.6	—	83	14	64	19	*	34	35	35	55	0.49	—	5	8,918	s.	42	n.	10	22	11	11	2	3.9	49.0	1894	37.8	1891											
<i>Southern Plateau.</i>																																													
Abilene.....	1,749	9	28.19	30.03	—	.02	57.8	+ 1.6	92	13	70	24	29	45	40	36	53	1.66	+ 0.1	7	9,345	se.	42	dw.	28	13	2	3	1	59.1	1887	49.6	1891												
Amarillo.....	3,691	....	26.20	30.02	—	.	40.4	—	77	14	58	17	20	34	39	22	43	0.05	—	8	14,386	sw.	66																					

TABLE II.—*Meteorological record of voluntary and other co-operating observers, March, 1894.*

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
Alabama.	0	0	0	Ins.	Arizona—Cont'd.	0	0	0	Ins.
Alco.	85	26	60.8	....	Willcox* ⁸	80	23	45.9	0.70
Auburn†	82	21	58.7	2.54	Yuma* ⁸	95	42	65.7	0.00
Bermuda* ⁶	84	24	59.9	5.57	Arkansas.	....	....	....	....
Birmingham†	87 ^d	27 ^d	62.4 ^d	4.44	Arkadelphia†	....	....	....	....
Brewton†	83	25	61.2	7.88	Ashdown†	88	25	56.4	9.20
Carrollton* ⁷	79	25	58.5	4.82	Bee Branch† ^d	85	19	55.2	0.55
Citronelle†	80	30	61.8	6.48	Blanchard Springs†	85	23	57.1	9.74
Claiborne Landing†	....	....	....	Brinkley†	81	22	54.2	13.35	
Clanton†	83	22	59.6	4.90	Camden†	....	....	....	....
Cordova†	....	....	....	Charleston†	85	24	56.5	11.87	
Daphne†	85	28	61.0	8.06	Cassville†	78	13	52.2	7.00
Demopolis†	....	....	....	Conway* ¹	79	24	54.9	9.28	
Eiba* ¹	82	30	65.7	7.63	Cornerstone* ¹	76 ^f	26 ^f	55.8 ^f	14.25
Eufaula a†	86	28	62.6	3.22	Corning†	81	19	52.6	6.61
Eufaula c†	....	....	....	Dallas* ¹	76 ^f	22 ^f	53.6 ^f	11.25	
Florence a†	....	....	....	Dardanelle†	....	....	....	....
Florence b†	81	19	54.8	5.59	Fayetteville†	82	15	52.2	5.66
Fort Deposit†	85	25	60.4	4.91	Forrest†	82	21	58.8	14.70
Gadsden†	87	20	58.2	2.72	Fulton†	....	....	....	....
Greensboro†	84	24	58.2	4.94	Gaines Landing†	....	....	....	....
Healing Springs†	84	23	57.6	5.18	Hamburg.	84	21	56.9	10.57
Highland Home†	83	26	60.9	4.26	Helena a†	....	....	....	....
Livington†	....	....	....	Helena b†	80	24	56.2	8.91	
Lock No. 4	....	....	....	Hot Springs	86	19	54.8	10.40	
Madison Station†	82	20	60.0	3.83	Hot Springs (near)	....	....	....	....
Maple Grove†	83	19	56.6	3.73	Keenes Ferry†	84	14	52.8	9.17
Marion†	....	....	....	Kirby†	84	....	....	....
Mount Willing†	84	25	59.6	5.91	Lonoake* ¹	77	26	57.0	13.00
Newbern†	83	24	57.3	4.39	Madding†	....	....	....	....
Newburg†	85	15	55.6	5.31	Mount Ida†	83	17	52.0	11.73
Newton†	87	26	60.4	3.61	Mount Nebo†	75	20	53.5	10.10
Opelika†	76	26	60.2	1.75	New Gascony* ¹	76 ^f	29 ^f	55.8 ^f	14.25
Pine Apple†	84	25	59.3	5.85	Newport a†	78	21	54.0	8.16
Pushimataha†	84	29	60.6	5.11	Newport c†	....	....	....	....
Rock Mills†	84	20	56.2	5.81	Oscoda†	81	24	54.0	8.86
Scottsboro†	81	19	55.4	4.09	Ozark†	83	21	55.7	5.59
Seima†	....	....	....	Rison†	81	20	55.8	10.12	
Starlington* ¹	85	26	58.6	5.80	Rogers†	83	8	46.4	4.73
Sturdevant†	....	....	....	Russellville†	84	22	54.8	9.03	
Talladega a†	....	....	....	Searcy†	83	18	52.2	7.76	
Talladega b†	86	21	58.4	4.70	Scarritt†	81	25	55.6	14.33
Tallassee Falls†	....	....	....	Texarkana†	86	26	58.6	4.38	
Tuscaloosa†	88	21	57.6	5.18	Warm Springs* ¹	80	18	52.1	5.20
Union†	86 ^d	26 ^d	58.6 ^d	4.60	Washington†	83	24	56.1	12.50
Union Springs a†	87	22	59.6	3.14	Wiggs†	....	....	....	....
Uniontown†	82	25	60.0	4.61	Winslow†	78	13	49.0	1.53
Valley Head†	82	16	53.6	3.14	California.	....	....	....	....
Warrior†	....	....	....	Ager ^s	76	26	45.5	1.53	
Wetumpka†	....	....	....	Agnew ^s	76	33	51.8	0.73	
Wilsonville†	....	....	....	Anderson* ¹	74	22	47.6	1.98	
Alaska.	....	....	....	Antioch* ⁸	77	36	52.7	0.37	
Killisnoo†	45	10	30.8	7.70	Apots* ⁸	80	30	52.1	0.33
Metlakatla†	54	11	34.6	8.10	Arcata†	63	29	46.4	8.52
Arizona.	....	....	....	Arlington Heights	88	29	54.2	4.48	
Ariz. Canal Co. Dam	91	30	58.2	0.75	Athhone* ⁸	85	35	54.5	0.34
Benson* ⁶	90	36	61.0	1.20	Auburn* ⁸	84	29	51.7	1.95
Bisbee* ¹	90	40	66.0	0.40	Bakersfield a* ⁸	79	29	51.7	1.95
Buckeye†	75	24	49.0	1.91	Ballast Point L. H.	....	....	....	....
Calabash†	95	31	61.1	0.90	Barstow†	84	24	55.1	1.25
Casa Grande* ⁵	80	20	50.4	0.79	Beaufort†	84	24	55.1	0.00
Chiricahua Mts.	90	40	63.3	0.62	Belmont* ⁸	73	44	57.0	0.48
Dragoon Summit* ⁶	72	29	53.4	Berendo* ⁸	84	36	56.2	0.48	
Dudleyville†	86	30	55.4	1.22	Berkley†	69	34	49.8	0.91
Eagle Pass* ³	86	26	41.9	0.81	Bethany* ¹	77	36	51.7	0.33
Farleys Camp ²	....	....	....	Bishop Creek* ⁸	81	31	53.8	0.00	
Flagstaff†	64	— 6	36.6	5.20	Boca* ⁸	70	0	33.2	0.75
Fort Apache	75	18	43.3	1.36	Borden* ⁸	82	32	54.9	0.15
Fort Bowiet	79	24	51.2	1.07	Boulder Creek* ⁸	74	30	49.1	2.11
Fort Grant	81	10	48.8	0.66	Brentwood* ⁸	78	26	51.0	0.25
Fort Huachuca	87	16	49.0	1.12	Brighton* ⁵	85	32	56.2	0.31
Gila Bend b* ⁸	92	36	61.9	0.71	Byron* ⁸	80	31	51.2	0.32
Globe†	81	29	53.6	0.94	Caliente* ⁸	76	38	54.9	1.60
Holbrook†	79	16	46.0	0.16	Calistoga* ⁸	79	34	53.3	3.21
Keams Canyon†	70	12	40.1	0.56	Capitolia* ⁸	70	30	52.1	0.00
Maricopa* ⁸	85	40	60.4	0.50	Capitolia a* ⁸	70	30	52.1	0.00
Mount Huachuca†	81	18	49.3	1.02	Carmel* ⁸	71	31	51.9	0.00
Natural Bridge†	....	....	....	C. Mendocino L. H.	....	....	....	....
Navajo* ⁸	9	30	9.9	Capitolia b* ⁸	70	30	52.1	0.00	
Nogales* ⁸	78	31	57.8	Castrovile* ⁸	69	31	54.0	0.00	
Oracle†	77	25	51.4	1.87	Centerville* ¹	78	28	53.6	1.23
Oro	....	....	....	Chico* ⁸	78	28	52.7	1.03	
Palomas†	96	25	59.2	0.67	Chino* ⁸	82	31	51.9	0.47
Pantano* ⁸	82	32	51.5	45	Clementon†	81	28	54.0	0.85
Payson* ¹	70	15	41.6	1.00	Colegrove†	81	28	53.0	0.05
Peoria†	84	35	59.9	0.77	Colfax* ⁸	70	24	46.8	3.62
Phoenix a†	90	29	57.9	0.62	Colton* ⁸	82	32	55.8	2.00
Phoenix b†	90	33	59.6	0.62	Columbus†	83	30	53.2	0.80
Red Rock* ¹	94	34	61.4	2.40	Corning* ⁸	82	34	54.0	0.85
Reyment†	88	31	55.7	2.22	Crescent City	63	30	45.8	14.11
Rye†	85	23	50.0	1.30	Crescent City L. H.	....	....	....	....
St. Helena R'ht†	85	22	51.4	1.16	Crofton* ⁸	86	35	55.6	1.18
San Carlos†	86	23	51.6	1.14	Davisville a* ⁸	78	35	51.9	0.94
San Simon* ⁸	78	28	56.7	0.15	Deep Creek†	....	....	....	....
Show Low	....	....	....	Delano* ⁸	83	32	54.9	0.64	
Signal†	87	32	56.6	2.91	Delta* ⁸	77	33	53.4	2.60
Texas Hill* ⁸	90	40	64.7	0.00	Dinuba* ⁸	80	32	55.5	1.02
Tucson a†	86	26	56.2	1.10	Downey* ⁸	90	38	56.5	0.52
Tucson b* ⁸	90	30	64.5	Dry Creek* ⁷	80	30	48.6	0.00	
Walnut Grove†	....	....	....	Drytown†	76	27	49.5	1.48	
Whipple Barracks	78	20	46.4	2.46	Dunnigan* ⁸	78	34	51.1	0.93
Wilgus†	79	— 9	41.9	0.88	Dunsmuir* ⁸	77	21	45.5	6.05
....	....	....	....	East Brother L. H.	....	....	....	....

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.			Max.	Min.		
California—Cont'd.	0	0	0	Ins.	Edgewood* ⁸	74	18	42.9	1.83	New Almaden* ⁸	75	34	52.3	0.88
Edinmanton* ¹	63	12	35.1	7.08	Eldorado* ⁸	81	32	51.4	2.25	Newcastle b* ⁸	76	27	49.2	1.49
Elmira* ⁸	85	35	53.3	0.97	Emigrant Gap* ⁸	50	12	33.8	2.49	Newhall* ⁸	80	30	53.6	0.02
El Verano* ⁸	75	35	51.0	2.49	Esparo* ⁸	86	37	51.1	1.21	Niles* ⁸	68	32	54.1	0.00
Evergreen	....	....	....	....	Fall Brook* ¹	83	30	49.8	1.36	Nordhoff†	83	26	51.0	0.29
Farmington* ⁸	75	39	51.6	0.13	Felton* ⁸	86	28	55.1	0.60	Northwall* ⁸	80	34	52.1	1.25
Florence* ⁸	80	31	50.2	0.54	Florence* ⁸	84	31	50.2	0.54	Oakdale a* ⁸	79	27	51.3	0.54
Folsom City a* ⁸	85	35	54.3	0.00	Folsom City b* ⁸	82	33	53.8	1.13	Oakdale b* ⁸	78	26	51.8	0.50
Folsom City b* ⁸	82	33	54.3	0.00	Fort Ross	....	....	....	....</	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip. n.	Stations.	Temperature. (Fahrenheit.)			Precip. n.
	Max.	Min.	Mean			Max.	Min.	Mean	
California—Cont'd.	o	o	o	Ins.	Colorado—Cont'd.	o	o	o	Ins.
Squirrel Inn	35	32	32.2	3.54	River Bend ⁺	80	44	44.1	1.00
Stockton ^a	75	32	52.2	0.45	Rocky Ford ⁺	80	9	43.3	0.45
Stockton ^b	74	37	50.5	0.61	Saint Cloud	.....	.....	.....	1.10
Suisun City ^a	80	35	53.9	0.88	Sanborn	.....	.....	.....	T.
Summit ^a	43	1	28.9	0.00	San Luis ⁺	66	4	36.0	0.76
Susanville [†]	68	19	39.1	2.35	Scissors [†]	2.20
Tehachapi ^a	62	26	42.4	0.03	Seibert [†]	0.23
Tehachapi ^b	72	20	41.6	1.45	Smoky Hill Mine [†]	67	3	34.8	1.00
Tehama ^a	78	34	55.1	1.00	Stardom [†]	56	-2	27.2	1.00
Templeton ^a	83	28	57.2	0.61	Steamboat Spring [†]	49	-10	26.0	1.60
Towles ^a	70	14	42.8	5.39	Sunnyside	52	5	27.4	1.29
Tracy ^a	82	40	53.6	0.00	Surface Creek [†]	65	12	40.7	1.50
Traver ^a	76	44	59.3	0.37	Thor [†]	77	1	35.3	0.07
Trinidad L. H.	.....	.....	.....	9.34	The S. Ranch [†]	70	13	42.4	1.13
Tropic ^a	80	28	55.3	0.90	Twin Lakes	.....	.....	.....	0.00
Truckee ^a	50	-7	31.0	2.05	Vilas	.....	.....	.....	0.10
Tulare ^a	82	33	53.7	0.98	Wallett	.....	.....	.....	0.40
Tulare ^b	.....	.....	.....	1.16	Ward District	.....	.....	.....	1.39
Tulare c.	92	28	55.2	0.77	Watkins [†]	59	10	36.0	1.10
Tunnel No. 2	.....	.....	.....	.....	Yuma	.....	.....	.....	1.10
Turlock a [†]	80	35	57.6	0.00	<i>Connecticut.</i>				
Turlock b [†]	80	25	51.9	0.20	Bridgeport [†]	61	21	39.8	1.48
Ukiah [†]	74	26	48.2	3.03	Canton	72	12	39.9	1.71
Upper Lake	79	27	48.8	1.80	Colchester	63	16	41.2	1.55
Upper Mattole ^a	78	36	50.0	8.45	Falls Village	.....	.....	.....	1.63
Vacaville ^a	82	35	53.0	1.18	Greenfield Hill	.....	.....	.....	1.16
Vacaville ^b	82	37	55.1	0.61	Hartford b.	.....	.....	.....	1.62
Valley Springs ^a	84	35	56.2	0.91	Hartford c.	66	19	41.4	1.67
Ventura [†]	68	33	51.4	0.27	Lake Komomo	.....	.....	.....	1.78
Vina ^a	76	41	54.6	1.41	Lebanon	.....	.....	.....	1.71
Volcano Springs ^a	105	38	71.5	0.00	Middleton	67	17	41.7	1.71
Walnut Creek [†]	79	30	51.8	0.67	New Hartford a [†]	65	13	38.4	1.83
Weaverville [†]	78	21	46.8	4.60	New Hartford b.	.....	.....	.....	1.83
Wenrich Ranch	.....	.....	.....	N. Grosvenor Dale	64	19	40.3	0.94	
West Butte [†]	80	31	52.0	0.65	Norwell	65	16	39.5	1.22
Westley ^a	79	28	57.6	0.11	Southington [†]	67	18	40.2	1.21
West Point [†]	South Manchester	.....	.....	.....	1.76	
Wheatland	78	32	52.6	1.09	Stevenson	.....	.....	.....	1.44
Whittier ^a	82	40	59.4	0.63	Storrs	64	14	39.2	1.18
Williams ^a	80	30	54.4	0.86	Thompson [†]	60	15	38.2	1.96
Willows a [†]	66	30	48.3	0.81	Voluntown [†]	62	11	41.2	1.65
Willows b [†]	75	35	56.0	1.03	Wallingford [†]	1.60
Winchester [†]	89	22	53.3	0.77	Waterbury	68	18	41.0	1.43
Winters ^a	76	35	54.8	0.73	West Simsbury	.....	.....	.....	1.69
Wire Bridge ^a	78	31	51.0	2.19	<i>Delaware.</i>				
Woodland ^a	74	36	50.7	0.80	Dover [†]	79	21	47.8	1.27
Yerba Buena L. H.	.....	.....	.....	Milford	84	19	48.8	1.43	
Yreka [†]	72	12	42.5	3.32	Millsboro	82	17	47.5	1.60
Yuba City ^a	72	43	56.9	0.89	Seaford [†]	82	18	48.4	1.18
<i>District of Columbia.</i>									
Abbott	.....	.....	.....	Disting Reserv'r [†]	78	22	48.4	1.13	
Akron [†]	72	10	38.4	0.90	Rec'ng Reserv'r [†]	76	21	47.8	1.04
Alma [†]	45	-6	23.1	0.88	West Washington	86	18	51.2	1.00
Amherst [†]	<i>Florida.</i>					
Arboles	.....	.....	.....	Amelia [†]	82	34	63.6	2.60	
Avoca [†]	Archer [†]	93	34	67.9	1.96	
Boulder [†]	76	15	42.2	1.40	Brooksville [†]	86	35	65.9	1.41
Box Elder	.....	.....	.....	De Land [†]	90	39	60.2	0.59	
Breckenridge [†]	61	-14	23.3	1.50	Eustis [†]	86	38	66.8	....
Brush [†]	79	3	39.2	0.90	Federal Point [†]	90	38	68.7	0.88
Byers [†]	66	10	33.9	0.00	Fort Meade [†]	87	39	65.0	1.84
Canyon [†]	75	11	43.8	1.16	Grasmere [†]	84	34	65.6	0.72
Castle Rock [†]	74	3	38.8	0.95	Green Cove Spgs [†]	85	33	63.8	2.72
Cheyenne Wells [†]	80	10	35.0	0.10	Homeland [†]	85	40	67.4	1.00
Climax [†]	38	-12	15.3	4.81	Kissimmee [†]	93	39	70.6	0.74
Collbran	.....	.....	.....	Lake City [†]	87	35	67.3	3.17	
Como (near) [†]	51	-2	26.0	0.66	Manatee [†]	88	39	68.5	1.02
Cope [†]	78	7	40.2	0.50	Merritt Island [†]	88	43	69.7	0.84
Deer Trail ^a	70	7	40.9	0.80	Moseley Hall [†]	84	30	65.1	4.04
Delta [†]	76	7	41.8	0.64	Mullet Key [†]	80	42	67.9	0.64
Divide Ex. Station	66	-3	36.6	0.83	Myers [†]	87	46	69.0	1.07
Downing [†]	74	9	41.5	0.93	New Smyrna [†]	85	38	64.6	1.08
Dumont	60	6	35.4	1.10	Oak Hill [†]	84	42	69.7	....
East Dale	.....	.....	.....	Ocala [†]	88	39	66.2	0.99	
First View [†]	77	.....	41.8	0.68	Orange City [†]	91	37	67.4	0.53
Fort Collins [†]	73	10	37.4	0.67	Orlando [†]	88	32	64.7	2.01
Glenwood Spgs [†]	70	11	44.2	2.21	Oxford [†]	88	37	63.1	1.54
Gold Hill [†]	57	7	36.7	1.27	Plant City [†]	92	37	68.7	1.33
Grand Junction [†]	73	20	45.6	0.97	Pearl City [†]	92	37	65.5	1.54
Greeley [†]	71	9	37.2	0.31	Saint Francis B's.	84	31	68.0	1.28
Greenhorn [†]	71	-3	35.6	3.10	Saint Petersburg [†]	89	40	69.2	1.65
Gunnison [†]	55	-19	26.2	0.90	Tallahassee [†]	86	29	62.8	4.45
Holly [†]	Tarpon Springs [†]	88	38	67.4	2.03	
Hugo ^a	75	10	42.7	0.40	<i>Georgia.</i>				
Hugo (near) [†]	76	2	36.0	0.54	Adairsville [†]	84	18	56.8	3.14
Husted [†]	74	3	39.4	0.39	Alapaha [†]	88	28	62.4	4.25
Idaho Springs [†]	63	0	31.8	0.74	Albany [†]	85	27	62.5	3.28
Kirk	.....	.....	.....	Americus [†]	90	23	63.2	3.19	
Kit Carson ^a	82	10	44.8	0.05	Athens [†]	82	22	57.6	3.34
La Jara [†]	66	4	36.7	0.01	Bainbridge [†]	6.50
Las Animas [†]	76	5	42.9	T.	Blakely [†]	85	27	62.6	5.75
Lay [†]	62	4	33.3	1.10	Brag [†]	92	25	63.1	2.00
Le Roy [†]	73	2	36.9	0.95	Camilla [†]	86	28	62.8	3.84
Leslie	.....	.....	.....	Canton [†]	82	27	62.9	2.92	
Loveland	.....	.....	.....	Clayton [†]	82	16	53.6	2.48	
McCoy [†]	Cohutta [†]	83	27	55.5	2.98	
Manhattan	.....	.....	.....	Columbus [†]	91	24	63.0	3.47	
Meeker [†]	65	2	36.8	0.69	Cordele [†]	89	25	61.2	3.06
Minneapolis [†]	85	11	44.7	0.35	El Dorado [†]	0.50
Monte Vista	64	2	33.3	T.	Govington [†]	84	19	57.6	2.05
Moraine [†]	55	-3	31.6	1.08	Dalhongea [†]	83	15	55.5	2.71
Pagoda (near) [†]	61	-5	31.9	1.65	Darien [†]	89	30	64.8	3.24
Parachute [†]	70	12	43.2	0.79	Diamond [†]	3.20
Red Cliff.	.....	.....	.....	Dublin [†]	87	26	66.1	5.50	
Rico	.....	.....	.....	Elberton [†]	88	19	56.6	2.64	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip. n.	Stations.	Temperature. (Fahrenheit.)			Precip. n.	Stations.	Temperature. (Fahrenheit.)			Precip. n.
	Max.	Min.	Mean			Max.	Min.	Mean			Max.	Min.	Mean	
Georgia—Cont'd.	o	o	o	Ins.	Georgia—Cont'd.	o	o	o	Ins.	Illinois—Cont'd.	o	o	o	Ins.
Fleming [†]	80	27	61.9	2.52	Forsyth [†]	90	26	62.8	3.71	Tuscola [†]	77	11	43.0	3.03
Gulf [†]	87	27	59.7	2.50	Gulf [†]	87	26	62.6	3.14	Walnut [†]	81	9	44.3	2.98
Gillsville [†]	83	24	54.0	3.54	Hawkins [†]	85	21	59.6	2.40	Warsaw [†]	0.73
Hephzibah [†]	82	26	62.2</td											

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Iowa—Cont'd.	°	°	°	Ins.
Mount Vernon ^a ...	79	3	40.4	3.65
Murray			0.26	
Newton	79	2	41.9	2.21
North McGregor ^f			2.33	
Osage ^c ...	1	34.3	1.85	
Oskaloosa ^f	80	6	43.1	2.21
Ottumwa	81	6	44.8	2.36
Ovid ^f	80	5	43.2	2.36
Panama ^f	82	2	42.1	0.62
Richland ^e	84	4	41.3	2.61
Rockwell City			1.35	
Sac City ^f	82	-2	37.5	1.15
Seymour ^f	80	5	44.5	0.72
Sibley	80	-5	37.2	1.01
Spirit Lake ^f	82	-5	38.1	1.17
Tipton ^f	79	5	42.2	3.38
Toledo ^a ...	82	2	41.8	2.53
Vinton ^a	71	4	40.3	2.41
Washington ^f	82	6	42.0	2.97
Webster City ^a	80	0	37.8	1.70
West Bend ^a ...	80	-4	37.1	....
Williams ^a	70	-1	37.4	1.62
Winterset ^f	81	3	42.0	2.76
Kansas				
Abilene ^f	86	8	48.8	0.62
Achilles ^c ...	84	9	35.0	0.37
Allison ^c ...	84	9	39.6	0.25
Alticoa ^c ...	70	16	46.9	2.21
Atholton ^f	83	8	46.4	1.79
Beloit ^f	85	4	41.8	0.05
Bucklin			0.05	
Burlington ^f	86	11	47.8	1.87
Cawker City ^a	74 ^d	8	41.8	0.20
Colby ^f	81	7	42.2	0.30
Coldwater ^f	88	10	47.7	0.33
Colyer			0.25	
Columbus ^f	79	14	49.2	3.37
Coolidge ^f	81	9	44.8	0.10
Cunningham ^f	83	7	47.8	0.42
Downs			0.13	
Eldorado ^f	80	11	46.6	0.50
Elk City ^a	80	17	50.8	1.92
Emporia ^f	80	12	48.7	1.35
Englewood ^f	92	5	47.9	0.07
Eureka Ranch ^f	84	6	43.7	0.61
Fort Riley ^f	80	8	47.5	0.63
Garden City ^f	82	8	45.8	1.82
Garfield			0.12	
Gibson ^a	78	1	41.3	0.60
Gove ^a ...	85	14	41.2	0.37
Grainfield			0.04	
Grenola ^a	82	12	48.8	1.65
Grinnell			0.05	
Halstead ^f	76	10	45.4	0.96
Hays City ^f	85	1	44.6	0.00
Horton ^f	82	9	45.8	1.67
Hutchinson ^f	84	12	48.4	0.69
Independence ^f	80	14	50.6	2.73
Ionia ^f	87	0	42.5	0.25
Jacqua ^f	82	6	41.2	0.73
Johnson ^f	82	10	44.2	0.00
Kiowa ^f	85	9	50.4	0.65
Lakin ^f	85	...	1.03	
Lawrence ^a	92	10	48.3	1.22
Lebo ^f	83	9	48.1	1.66
Leoti ^f	80	8	43.1	0.38
Macksville ^f	84	5	46.8	0.20
McPherson ^f	80	10	46.4	0.73
Manhattan ^b	86	8	47.3	0.67
Manhattan ^c *	82	8	43.0	0.81
Marion ^f	82	9	47.1	0.87
Marmaton			3.48	
Medicine Lodge			0.52	
Minneapolis ^f	86	4	45.2	0.23
Monument ^a	84	12	42.4	0.10
Morland ^f	84	-3	42.2	0.45
Morton ^f	84	10	46.6	0.40
Mount Hope ^a	82	16	49.0	0.66
New Eng. Ranch ^f	82	5	44.7	0.37
Norton ^f	83	8	44.3	0.25
Oberlin ^f			0.68	
Olathe ^f	80	8	47.4	2.28
Oswego ^f	81	9	49.4	3.43
Pauline ^c	80	12	48.4	0.87
Phillipsburg ^f	72		0.84	
Pleasant Dale ^f	83	3	45.9	0.68
Quinter ^f			0.25	
Rome ^c ...	82	8	48.7	1.18
Sedan ^f	80	13	50.5	2.81
Sharon Springs ^a	84	13	43.5	0.15
Sterling ^f	80	10	50.6	0.30
Topeka	79 ^e	10 ^e	43.5 ^e	1.30
Tribune ^f	86	9	44.8	0.30
Ulysses ^f	85	8	46.0	0.10
Wakefield ^f	85	12	47.0	0.36
Wallace ^c			0.28	
Warnege ^a	80	10	45.6	0.92
Washington ^f	85	7	46.1	0.68
Winfield ^c	82	10	48.6	1.17
Winnona ^a	84	14	44.8	0.02
Yates Center ^f	80		2.15	
Kentucky.				
Alpha ^a ...	83	18	56.7	2.20
Blandville ^a ...	76	14	50.6	4.38
Bowling Green ^a ...	78	21	49.3	2.89

MONTHLY WEATHER REVIEW.

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Kentucky—Cont'd.	°	°	°	Ins.
Bowling Green ^b ...	86	16	54.3	2.72
Burnside ^f		1-13	2.90	
Caddo ^c ...	78	10	47.6	2.50
Canton ^c ...	80	20	52.7	5.35
Carrollton ^c ...	85	19	49.8	2.34
Catlettsburg ^c ...	79	19	50.3	1.25
Eddyville ^f		4-71	4.71	
Edmonton ^f	80	14	51.2	2.70
Elizabethtown ^f	81	14	49.3	3.55
Eubank ^f	85	10	49.9	1.84
Falmouth ^f		2-50	2.50	
Fords Ferry ^f	82	16	52.9	3.39
Franklin ^c ...	80	20	54.9	3.00
Georgetown ^f	81	13	48.7	....
Greendale ^f	86	14	49.3	2.04
Greensburg ^c ...	77	16	51.0	3.26
Harrodsburg ^f	84	12	50.0	2.10
Henderson ^f	81	18	53.4	3.11
Hendricks ^f		1-70	1.70	
Louisville ^f		1-26	1.26	
Middlebury ^f	83	14	51.7	2.19
Mount Sterling ^f	85	14	47.6	1.80
Munfordville ^c ...	82	15	51.9	1.55
Paducah ^c ...			3.86	
Paducah ^b ...	82	18	54.0	3.83
Perryville ^f	79	10	50.5	3.80
Princeton ^f	82	11	50.4	4.16
Richmond ^f	84	10	50.8	1.15
Russellville ^f	83	14	53.0	3.73
Sandy Hook ^f	80	11	48.0	1.15
Shelbyville ^f	80	16	50.2	1.98
South Fork ^c ...	84	16	49.6	2.94
Springfield ^f	85	15	50.8	2.39
Williamsburg ^f			2.55	
Louisiana.				
Abbeville	87	31	64.1	7.06
Alexandria ^f		30	6.61	
Amitie ^f	85	20	61.7	7.99
Bastrop ^f	88	24	59.6	9.67
Baton Rouge ^f	83	29	61.6	7.68
Calhoun ^f	84	25	59.2	8.22
Cameron ^c ...	35	62.8	2.91	
Cheneyville ^f	82	34	58.4	6.34
Clinton ^f	83	35	57.6	7.86
Concord ^f	73	16	40.5	0.93
Dudley ^f	67	14	39.6	1.27
East Templeton ^a	68	16	37.3	0.63
Egg Rock, Nahant.	66	19	36.5	1.21
Fall River ^a	69	17	40.4	1.02
Fiskdale			1.42	
Fitchburg ^a	72	17	38.8	0.81
Fitzburg ^b	74	14	39.6	1.11
Framingham	69 ^f	15	46.6	1.41
Gilbertville	70	14	38.4	1.11
Cambridge ^a	72	19	42.0	0.37
Cambridge ^b	71	20	41.4	0.84
Chestnut Hill ^f	70	17	41.8	1.14
Clinton			1.08	
Concord ^f	73	16	40.5	1.34
Dudley ^f	73	11	38.0	0.66
Eagle ^f	74	12	38.8	1.34
Easton ^f	75	10	39.6	1.44
Easton ^a	76	19	31.9	1.10
Easton ^b	75	10	39.2	1.26
Easton ^c	76	10	31.9	1.20
Easton ^d	77	11	31.9	1.06
Easton ^e	78	12	31.9	1.05
Easton ^f	79	11	31.9	1.05
Easton ^g	80	12	31.9	1.05
Easton ^h	81	12	31.9	1.05
Easton ⁱ	82	12	31.9	1.05
Easton ^j	83	12	31.9	1.05
Easton ^k	84	12	31.9	1.05
Easton ^l	85	12	31.9	1.05
Easton ^m	86	12	31.9	1.05
Easton ⁿ	87	12	31.9	1.05
Easton ^o	88	12	31.9	1.05
Easton ^p	89	12	31.9	1.05
Easton ^q	90	12	31.9	1.05
Easton ^r	91	12	31.9	1.05
Easton ^s	92	12	31.9	1.05
Easton ^t	93	12	31.9	1.05
Easton ^u	94	12	31.9	1.05
Easton ^v	95	12	31.9	1.05
Easton ^w	96	12	31.9	1.05
Easton ^x	97	12	31.9	1.05
Easton ^y	98	12	31.9	1.05
Easton ^z	99	12	31.9	1.05
Easton ^{aa}	100	12	31.9	1.05
Easton ^{bb}	101	12	31.9	1.05
Easton ^{cc}	102	12	31.9	1.05
Easton ^{dd}	103	12	31.9	1.05
Easton ^{ee}	104	12	31.9	1.05
Easton ^{ff}	105	12	31.9	1.05
Easton ^{gg}	106	12	31.9	1.05
Easton ^{hh}	107	12	31.9	1.05
Easton ⁱⁱ	108	12	31.9	1.05
Easton ^{jj}	109	12	31.9	1.05
Easton ^{kk}	110	12	31.9	1.05
Easton ^{ll}	111	12	31.9	1.05
Easton ^{mm}	112	12	31.9	1.05
Easton ⁿⁿ	113	12	31.9	1.05
Easton ^{oo}	114	12	31.9	1.05
Easton ^{pp}	115	12	31.9	1.05
Easton ^{qq}	116	12	31.9	1.05
Easton ^{rr}	117	12	31.9	1.05
Easton ^{ss}	118	12	31.9	1.05
Easton ^{tt}	119	12	31.9	1.05
Easton ^{uu}	120	12	31.9	1.05
Easton ^{vv}	121	12	31.9	1.05
Easton ^{ww}	122	12	31.9	1.05
Easton ^{xx}	123	12	31.9	1.05
Easton ^{yy}	124	12	31.9	1.05
Easton ^{zz}	125	12	31.9	1.05
Easton ^{aa}	126	12	31.9	1.05
Easton ^{bb}	127	12	31.9	1.05
Easton ^{cc}	128	12	31.9</td	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Minnesota—Cont'd.	0	0	0	In.	Missouri—Cont'd.	0	0	0	In.
Jadis †	46	-14	25.2	1.95	Farmersville	85	11	49.8	2.92
Lake Vermillion	59	-13	28.6	2.29	Fayette	85	12	49.8	2.15
L Winnibogoshish	60	-14	27.0	3.07	Fox Creek	82	12	50.8	2.73
Leech Lake †	57	-19	27.1	3.07	Fulton	80	7	46.6	0.93
Long Prairie †	66	-9	28.4	1.82	Gallatin	80	20	50.8	7.97
Luverne †	77	-5	35.5	0.81	Gayoso	83	11	48.9	3.19
Maple Plain	75	-4	34.0	2.06	Glasgow	83	19	49.2	4.20
Marfield †	55	-15	26.2	3.83	Gordonville	55	13	43.0	2.28
Mazeppa	60*	2	32.2	0.74	Gorin	72	7	50.8	3.74
Medford †	78	-2	35.8	2.00	Grove Dale	82	12	49.8	3.87
Milan †	79	-6	32.2	1.80	Half Way	89	10	49.3	2.16
Minneapolis †	75	-3	34.5	3.05	Harrisonville	81	12	47.8	2.71
Minneapolis b	74*	-3	33.6	2.93	Hastain	77	12	47.8	3.11
Minnesota City †	77	-6	37.1	1.23	Hermann †	75	10	48.0	5.57
Montevideo †	80	-5	34.0	1.28	Houston	75	13	49.6	4.73
Morris	71	-6	30.4	1.09	Ironton	80	13	49.2	3.80
New London	74	-6	30.9	1.37	Kidder	81	8	45.3	2.88
New Richland	72	4	32.4	0.00	Lamont	80	15	49.5	3.88
New Ulm	76	0	36.8	2.03	Lamonte	75	12	49.6	2.30
Ortonville †	.....	.....	.....	1.99	La Plata	76	16	45.4	2.43
Park Rapids	54	-15	26.9	1.73	Lebanon	80	14	50.9	5.63
Perham †	56	-12	27.0	0.00	Lexington	83	12	49.6	2.43
Pine River	55	-12	27.9	2.33	Liberty	80	13	49.2	2.38
Pokemana Falls	60*	-24	25.7	3.80	Louisiana Bridge	82	13	47.4	3.75
Red Lake †	51	-14	25.8	1.00	Marceline	82	13	47.4	3.46
Red Wing †	.....	.....	.....	Marshall	83	11	47.0	2.46	
Redwood Falls †	.....	.....	0.24	Mine La Motte	85	12	47.7	2.85	
Rolling Green †	73	-3	35.9	1.75	Mount Vernon	82	15	51.0	4.16
Rush City †	73	-5	30.7	2.97	Neosho	84	11	49.0	2.80
Saint Charles †	74	1	35.4	1.05	Nevada	77	8	45.0	1.40
Saint Cloud	68	-3	32.8	2.55	New Boston	78	12	49.2	3.20
Saint Olaff	57	-8	29.5	1.74	New Hartford	82	12	49.2	3.54
Saint Peter †	77	1	37.0	3.10	New Haven	82	16	50.2	3.31
Sandy Lake Dam	50	-22	27.7	2.33	New Madrid	79	20	54.4	7.44
Sauk Center	70	-10	28.5	2.41	New Palestine	75	12	49.1	1.21
Starbuck	69*	2*	33.5*	1.72	Oakfield	83	13	51.0	3.05
Endrice City	74	0	36.1	0.00	Oak Ridge	80	16	51.2	3.44
Two Harbors	51	-6	29.4	0.00	Olden	80	14	51.5	5.51
Wabasha	76	0	35.8	1.29	Oregon a	84	8	46.0	2.00
Willmar †	75	-5	31.4	2.03	Oregon b	83	9	45.2	1.89
Winona	75	-6	37.2	2.11	Oto	75	12	49.0	3.05
Worthington	78	-5	34.8	1.49	Palmyra	77	5	46.4	3.16
Mississippi	.....	.....	.....	Princeton	80	6	46.0	1.60	
Aberdeen †	.....	.....	4.27	Round Spring	77	4	49.2	5.08	
Agricultural Colge.	83	24	57.2	6.79	Paris	81	14	47.9	1.10
Batesville †	82	22	57.0	7.79	Phillipsburg	79*	23	48.3*	4.10
Biloxi †	82	30	60.8	6.00	Pickering	84	6	42.9	1.52
Briers	83	30	60.8	5.48	Platte River	80	12	42.5	2.16
Brookhaven †	82	22	59.4	5.46	Poplar Bluff	80	17	52.8	5.64
Canton	82	28	59.7	5.08	Potosi	77	5	46.4	3.16
Clarkdale	83	24	59.4	7.51	Princeton	80	6	46.0	1.60
Columbus	83	24	59.4	5.98	Round Spring	77	4	49.2	5.08
Crystal Springs †	84	24	60.5	3.77	Saint Charles	82	14	49.6	2.94
Duck Hill †	84	21	58.5	2.57	Saint Joseph	82	13	48.8	2.18
Edwards	84	26	60.2	10.11	Saint Louis	82	14	49.4	2.78
Enterprise †	85	22	60.3	4.25	Sarcocie	86	18	49.2	2.70
French Camps †	79	18	54.3	1.74	Sedalia	82	9	48.8	2.33
Greeneville a	79	24	57.6	8.98	Shelbina	82	9	48.8	1.80
Greeneville b	85	23	59.2	9.48	Steffenville	83	13	49.8	2.44
Hattiesburg	88	27	60.8	5.07	Stelladat	83	8	45.4	2.44
Itta Bena	84*	28	57.8	8.26	Sublett	78	8	45.4	3.70
Jackson †	85	27	60.9	3.56	Unionville	80	12	49.3	1.04
Kosciusko †	85	23	57.3	5.55	Vermont	81	11	47.5	1.83
Lake †	82	23	56.6	3.09	Villas	75	12	49.1	2.14
Leakesville †	86	28	61.1	5.71	Virgil City	80	14	48.6	3.21
Logtown †	82	32	62.6	6.85	Warrensburg	80	14	48.6	1.74
Louisville †	84	18	57.0	7.16	Warrenton	80	12	49.3	0.00
McComb †	84	28	62.3	2.77	Wheatland	80	12	49.3	3.00
Macon †	86	21	56.8	4.60	Whiteside	80	13	47.8	2.56
Mayersville	86	25	61.7	8.32	Montana	.....	.....	.....	.....
Moss Point †	82	30	62.7	0.00	Boulder	57	-1	28.0	0.71
Natchez	85	28	62.2	6.25	Chouteau	60	0	30.0	0.80
Okolona †	.....	.....	5.94	Fort Custer	64	0	31.7	1.05	
Palo Alto †	83	24	57.5	7.26	Fort Keogh	64	-9	25.5	1.75
Pontotoc †	82	24	57.7	6.35	Fort Logan	50	4	27.3	1.26
Stonington	84	34	63.4	.....	Fort Missoula	57	12	32.0	1.33
Thornton	84	30	60.0	7.46	Glasgow	69	-7	27.6	0.71
Topton	84	28	58.0	4.00	Glenive	62	8	28.9	2.60
University †	81	23	56.7	0.00	Great Fall	58	9	29.2	1.05
Water Valley	88	22	56.7	8.06	Hogan	54	-6	29.6	0.91
Waynesboro	85	25	57.6	6.85	Martinsdale	56	-1	29.6	1.71
Woodville †	85	26	62.8	7.94	Minigsville	71	-20	32.6	1.70
Yazoo City †	87	25	65.0	5.55	Musselshell	62	-5	29.2	0.74
Missouri	.....	.....	.....	Powder River	64	-17	27.8	2.83	
Appleton City †	82*	12*	48.8*	2.88	Red Lodge	77	3	34.8	1.13
Arlington †	.....	.....	4.08	Virginia City	57	3	29.8	1.13	
Arthur	5	36.6	2.20	Nebraska	.....	.....	.....	.....
Bagnell †	.....	.....	2.89	Agree	80	-4	34.4	1.67	
Bethany	82	7	44.7	2.78	Arborville	80	-2	40.7	0.44
Big Piney	.....	.....	3.10	Ashton	84	5	44.3	0.62	
Birch Tree	82	14	51.0	5.14	Bassett	76*	-9	34.6	0.78
Bluffton	82	13	54.5	2.83	Beatrice	84	8	42.6	0.91
Boonville	.....	.....	2.22	Beaver City	84	4	43.6	0.26	
Brunswick	84	11	47.3	0.39	Brattion	84	6	44.6	0.74
Carrollton	81	13	47.6	2.59	Burwell	66	6	40.8	0.33
Conception	79	8	38.6	.....	Callaway	77	1	39.9	0.80
Cowgill	.....	.....	4.25	Concord	64	-17	28.8	1.23	
Downing	.....	.....	2.78	David City	78	3	36.8	0.30	
East Lynne	12	45.2	2.54	Ericson	84	-2	39.4	0.80	
Edge Hill	74	18	49.3	3.37	Faribault	80	-1	35.8	1.46
Eight Mile	79	20	47.2	2.70	Fayett	80	6	44.6	3.19
Eldon	82	14	49.0	3.10	Farmington	80	12	38.0	0.28
Emma	82	12	46.8	2.15	Fayett	84	-2	39.4	0.91
Fairport	.....	.....	3.00	Fayett	84	-2	39.4	0.91	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.
	Max.	Min.	Mean			Max.	Min.	Mean		
Missouri—Cont'd.	0	0	0	In.	Nebraska—Cont'd.	0	0	0	Ins.	N. Hampshire—Con.
Farmersville	85	11	49.8	2.92	Ewing	57	8	44.6	2.15	Durham
Fayette	85	12	49.8	2.73	Fairbury	82	5	36.9	1.31	East Canterbury
Fox Creek	82	12	50.8	2.73	Fort Robinson	71	-1	38.0	0.80	Grafton
Fulton	80	7	46.6	2.83	Fort Sidney	73	1	44.5	0.50	Hanover
Gallatin	80	20	50.8	7.97	Franklin	85	3	40.5	1.27	Keene
Gayoso	83	11	49.2	1.26	Geneva	85	3	37.4	0.60	Lakeport
Glasgow	83	19	49.2	4.20	Gering	73	1	37.4	0.70	Lancaster
Gorin	72	13	43.0	2.28	Gering	73	1	37.4	0.70	Littleton
Grove Dale	82	7	50.8	3.74	Gering	73	1	37.4	0.70	Mine Falls
Half Way	80	10	49.3	2.16	Gering	73	1	37.4	0.70	Nashua
Harrisonville	89	10	49.3	2.16	Gering	73	1	37.4	0.70	Newton
Hastain	81	12	47.8	2.71	Gering	73	1	37.4	0.70	North Conway
Hermann	77	10	48.0	3.19	Gering	73	1	37.4	0.70	Pennichuck St'n
Houston	75	10	48.0	5.57	Gering	73	1	37.4	0.70	Peterboro
Ironton	75	13	43.0	2.28	Gering	73	1	37.4	0.70	Plymouth
Kidder	81	8	45.3	2.88	Gering	73	1	37.4	0.70	Sanbornton
Lamar	80	15	49.5	3.88	Gering	73				

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
New York.	0	0	0	Ins.	N. Carolina—Cont'd.	0	0	0	Ins.
Addison.....	70	8	39.9	1.06	Mount Airy †.....	84	16	50.6	0.86
Akron.....	.....	.....	1.64	.....	Mount Pleasant.....	86	19	56.2	3.03
Alfred Center.....	70	7	37.2	1.35	Murphy †.....	76	22	54.2	3.15
Angelica †.....	72	7	38.0	1.78	Newbern †.....	85	17	53.6	0.75
Arcade.....	72	10	37.2	1.83	Oak Ridge †.....	84	19	52.4	1.19
Arkwright.....	70	14	37.8	1.88	Pittsboro.....	86	25	57.8	2.31
Atlanta.....	.....	.....	1.14	Raleigh †.....	88	20	57.9	1.25	
Baldwinsville.....	72	12	36.9	2.18	Rockingham †.....	86	22	54.0	2.07
Bedford.....	.....	.....	1.27	Roxboro †.....	88	10	49.5	1.19	
Big Sandy *10.....	62	10	37.2	1.78	Salisbury.....	85	22	56.2	1.30
Binghamton †.....	68	14	39.8	1.51	Salisbury †.....	.....	.....	1.19	.....
Bolivar.....	.....	.....	1.78	Boonville.....	89	14	52.4	0.97	
Bovina Center.....	.....	.....	1.70	Selma.....	88	23	56.2	2.95	
Brentwood.....	66	20	40.6	2.75	Shelby †.....	79	18	52.8	.....
Brookfield.....	68	5	34.7	2.05	Sloam.....	88	24	58.5	4.33
Charlotte *10.....	74	19	39.2	1.96	Soapstone Mt †.....	84	17	53.4	1.76
Cherry Creek.....	.....	.....	2.47	Southern Pines †.....	91	20	58.7	1.44	
Cooperstown †.....	68	9	35.5	1.92	Tarboro.....	91	21	57.2	2.05
Cortland.....	64	9	35.5	1.59	Washington †.....	93	24	57.8	3.01
De Kalb Junction.....	.....	.....	2.39	Weldon †.....	87	23	54.3	2.13	
Demester.....	.....	.....	1.83	Willeyton.....	88	20	55.0	1.76	
Eden Center.....	80	9	38.3	2.53	North Dakota.	.....	.....	.....	.....
Elliis.....	.....	.....	1.12	Ashley.....	69	-21	25.7	1.55	
Elmira †.....	76	16	41.7	1.05	Berlin †.....	65	-18	26.5	1.92
Factoryville †.....	72	13	40.4	1.35	Church's Ferry.....	52	-12	22.6	1.82
Fleming.....	72	15	38.2	1.15	Devils Lake.....	48	-13	21.2	0.95
Fort Niagara †.....	74	21	40.6	0.88	Dickinson †.....	62	-19	22.5	1.94
Friendship.....	73	6	38.5	1.73	Fargo †.....	52	-16	26.4	1.29
Glens Falls.....	67	10	37.0	1.00	Forman †.....	64	-14	30.5	1.88
Gloversville.....	64	9	34.6	2.38	Fort Berthold.....	61	-9	30.2	3.05
Hess Road Stn †.....	74	17	39.1	1.43	Fort Stevenson †.....	59	-13	24.4	1.98
Honeymead Brook *1.....	67	16	39.1	1.59	Fort Yates†.....	69	-9	28.2	2.13
Humphrey †.....	75	9	38.5	2.27	Gallatin †.....	56	-12	25.3	1.00
Ithaca.....	.....	.....	1.28	Grafton †.....	47	-11	24.0	1.05	
Jamestown *6.....	67	15	41.3	1.93	Grand Forks.....	51	-9	26.1	0.84
Kings Station.....	.....	.....	2.17	Jamestown †.....	59	-9	27.2	0.81	
Lebanon Springs.....	73	12	37.4	0.96	Keilo †.....	57	-9	27.9	.....
Le Roy.....	74	14	38.1	2.32	Larimore.....	50 ¹	-13 ¹	25.7 ¹	0.88
Lockport.....	74	15	39.2	2.41	Lemert †.....	64	-16	24.5	0.72
Lowville.....	65	7	35.0	1.72	McKinney.....	46	-19	21.3	1.42
Lyons.....	72	17	39.7	2.03	Minto †.....	54 ²	-19 ³	19.8 ³	0.70
Madison Barracks †.....	70	13	38.2	2.17	Minto †.....	57	-12	25.0	0.77
Malone.....	66	5	34.5	2.98	Napoleon †.....	62	-15	25.4	1.25
Middletown.....	68	16	39.6	1.58	Napoleon †.....	70	-9	43.0	2.21
Minnewaska.....	65	10	36.5	1.65	Nelsonville.....	81	12	48.0	1.92
Mount Morris.....	75	12	38.9	0.97	New Alexandria.....	76	13	45.9	2.73
Newark Valley.....	.....	.....	1.52	New Berlin.....	73	12	43.3	1.08	
New Lisbon.....	68	8	35.9	1.40	New Bremen.....	78	13	45.2	1.57
North Hammond †.....	70	10	37.4	2.68	New Comerstown.....	81	15	44.4	1.97
Number Four †.....	60	1	32.9	3.40	New Holland.....	83	10	45.9	2.50
Ogdensburg.....	67	8	36.5	1.57	New Paris.....	78	12	44.5	1.67
Oxford.....	66	3	36.8	1.86	North Lewisburg.....	76	12	45.7	2.55
Palermo †.....	70	13	37.2	1.80	North Royalton.....	72	9	43.0	1.76
Perry City.....	68	12	37.3	0.99	Northwood.....	84	11	45.8	2.88
Phoenix.....	.....	.....	1.59	Northwalk.....	80	11	44.0	1.72	
Pine City.....	.....	.....	1.03	Oberlin.....	76	9	44.0	1.41	
Plattsburg B'ks.....	56	5	34.2	1.91	O. S. University.....	79	14	45.1	2.02
Port Jervis.....	67	39	1	1.57	Orangeville.....	74	10	41.8	2.05
Ogdensburg.....	67	8	36.5	1.57	Portskala.....	81	13	44.6	2.54
Watson.....	66	15	38.8	2.41	Plattensburg.....	79	12	45.2	2.31
Waukegan.....	66	1	38.0	1.50	P. Marblehead *10.....	76	19	44.0	0.83
Waukegan.....	66	18	39.4	1.57	Pomeroy.....	75 ^c	17 ^a	46.2 ^b	0.83
Wappingers Falls.....	66	18	39.4	2.47	Portsmouth a†.....	91	17	50.9	1.81
Warwick.....	.....	.....	0.87	Ridge.....	.....	.....	2.42	.....
Wedgewood.....	73	9	38.6	1.00	Ridge'le Corners.....	78	7	43.6	1.49
West Chazy.....	.....	.....	1.27	Ripley.....	82	15	47.6	2.59	
West Point †.....	72	11	38.2	1.33	Rittman.....	73	9	42.2	1.32
Willets Point.....	65	25	42.8	2.03	Rush Creek.....	74	11	43.3	1.83
North Carolina.	.....	.....	.....	Sharon Center.....	74	16	48.3	2.15	
Ashville †.....	84	11	50.5	1.56	Shenandoah.....	75	10	43.0	2.07
Auburn *1.....	90	23	50.5	1.82	Sidney †.....	75	.....	2.25	.....
Bailey *1.....	90	18	55.8	0.86	Springboro.....	82	8	47.8	2.44
Bakersville †.....	80	11	48.2	1.95	Spring Valley.....	82	8	47.8	2.04
Blowing Rock †.....	68	5	45.2	1.19	Stoutsburg.....	84	11	45.8	2.28
Bryson City †.....	.....	.....	2.47	Tipton †.....	87	13	48.1	0.83	
Chapel Hill †.....	88	19	55.7	1.78	Thurman.....	87	13	48.1	2.17
Canal Dover.....	78	14	46.1	2.20	Tiffin †.....	74	12	44.8	1.77
Canton †.....	74	15	43.7	2.23	Vanceburg.....	84	16	48.1	1.97
Cardington.....	75	10	43.3	1.94	Van Wert.....	75	11	44.4	2.30
Carrollton.....	80	12	45.0	2.29	Vermillion.....	76	13	42.5	1.33
Cedarville.....	.....	.....	2.30	Vickery.....	75	9	43.1	1.87	
Celina.....	80	14	47.3	1.95	Walnut.....	.....	.....	2.26	.....
Cherry Fork.....	86	12	46.3	2.74	Warren.....	77	12	43.0	2.53
Circleville.....	81	15	42.2	2.09	Wauseon.....	78	6	43.0	3.17
Clarksville.....	81	15	46.2	2.71	Waverly.....	84	13	48.2	2.09
Cleveland.....	76	14	44.0	2.00	Waynesville.....	77	11	43.9	1.91
Coalton.....	85	8	46.5	2.02	Wellington.....	76	15	45.2	2.07
Colebrook.....	.....	6	1.31	Westerville.....	76	9	42.8	2.50	
Cynthiana.....	81	15	43.9	2.49	Weymouth.....	78	9	43.8	3.17
Forest Hill *1.....	75	17	49.8	2.42	Wheeler †.....	80	14	43.5	2.37
Greenville †.....	88	2	52.3	2.73	Wooster a†.....	75	14	43.5	2.37
Henderson.....	88	19	55.4	1.90	Wooster b†.....	.....	.....	2.31	.....
Hughlands.....	74	4	45.8	2.99	Youngstown.....	75	10	43.4	2.48
Horse Cove †.....	77	9	50.4	3.15	Zanesville †.....	75	.....	1.92	.....
Lenoir *1.....	83	18	52.0	1.16	Oklahoma.	.....	.....	.....	.....
Lewiston.....	.....	.....	2.81	Anadarko †.....	94	17	54.5	3.30	
Lillington †.....	.....	.....	1.95	Arapaho †.....	84	13	51.4	0.88	
Littleton †.....	89	20	53.8	2.03	Buffalo †.....	88	12	52.2	0.10
Louisburg †.....	82	22	53.6	1.95	Burnett †.....	84	17	53.9	4.42
Lynn *1.....	86	.....	50.3	2.01	Clifton †.....	88	15	53.8	3.12
Marion.....	81	16	52.4	0.67	Enid †.....	84	17	50.7	0.33
May *1.....	88	22	55.5	1.97	Fort Reno †.....	88	15	49.6	1.90
Mocksville †.....	86	19	55.0	1.26	Fort Still †.....	88	19	53.9	2.82
Morganton *1.....	87	16	54.0	0.85	Fort Supply †.....	86	9	47.4	0.12
Greenfield.....	80	15	46.6	1.28	Guthrie †.....	84	19	54.0	3.32
Fostoria.....	76	8	43.9	1.31	Keokuk Falls †.....	86	18	54.6	1.94
Frankfort †.....	81	15	46.2	1.92	Mangum †.....	86	19	56.3	0.62
Garrettsville.....	74	11	40.7	2.52	Ponca †.....	84	15	51.7	2.56
Georgetown.....	84	15	45.1	2.36	Pond Creek †.....	84	9	49.3	0.22
Findlay.....	76	9	43.7	2.09	Stillwater.....	84	20	52.6	3.83
Albany a†.....	69	29	44.4	10.45	Winneway †.....	86	16	54.2	1.68
Albany b*.....	72	30	45.1	9.35	Oregon.	.....	.....	.....	.....
Albany a†.....	69	29	44.4	10.45	Findlay.....	76	22	44.4	2.65
Findlay.....	76	9	43.7	2.09	Fosteria.....	76	12	46.8	9.33
Greenville.....	76	12	46.5	2.28	Frankfort †.....	81	15	45.5	18.52
Huron.....	84	15	44.5	1.24	Garrettsville.....	74	11	40.3	1.37
Dupont.....	76	14	44.5	1.24	Georgetown.....	84	11	40.7	1.44
Ellsworth.....	75	9	43.0	1.68	Forest Hill *1.....	75	17	44.9	2.08
Elyria.....	75	11	44.1	3.24	Forest Hill *1.....	75	17	44.9	2.08
Fairport Harbor *10.....	72	20	42.2	2.15	Frederick.....	.....	.....	1.49	.....
Littleton †.....	89	20	53.8	2.03	Freeport †.....	86	14	44.2	2.28
Louisburg †.....	82	22	53.6	1.95	Gettysburg †.....	86	9	47.4	1.21
Lynn *1.....	86	.....	50.3	2.01	Grampian *1.....	70	10	39.8	2.27
Marion.....	81	16	52.4	0.67	Greensboro †.....	86	12	43.0	2.36
May *1.....	88	22	55.5	1.97	Greenville †.....	77	12	43.0	1.94

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Pennsylvania—Con.	0	0	0	Ins.	S. Dakota—Cont'd.	0	0	0	Ins.
Le Roy †	64	10	38.0	1.00	Gale †	70	-14	29.4	Llano *†*
Lewisburg	68	16	42.5	1.13	Gary †	76	-8	32.0	Longview †
Ligonier	78	4	42.8	2.29	Greenwood	79	-1	37.0	2.10
Lock Haven †	74	13	42.5	0.84	Highmore *†	72	-12	30.6	Luling †
Lock No. 4 †	74	11	45.0	1.95	Hotch City †	69	-17	34.2	McGregor †
Lycettsburg	77	11	45.0	2.31	Howard †	79	-6	35.2	Menardville *†
Mahoning †				2.55	Kimball †	90	-7	35.0	Mountain Spring †
Newcastle †	75	13	42.8	1.47	Midland †	76	-8	35.2	New Braunfels †
Oil City †				1.90	Millbank †	77	-7	33.2	Orange †
Ottaville				1.56	Northville *	64	-14	29.8	Paris †
Parker †				2.09	Oelrichs †	64	-14	33.2	Rockport *†
Philadelphia a				1.68	Parker †	80	-4	35.6	Rock Springs †
Philadelphia a	80	20	47.3	1.64	Piedmont				Round Rock †
Philadelphia c	76	21	45.9	1.70	Rosebad †	70	-4	35.3	San Marcos †
Phoenixville	78	16	45.3	1.76	Shiloh †	68	-18	30.8	Sierra Blanca †
Point Pleasant				1.39	Sioux Falls †	80	-4	36.0	Silver Falls †
Pottstown	80	20	45.4	1.74	Spearfish †	70	-9	31.6	Temple †
Quakertown	73	16	42.4	1.68	Tyndall †	81	-3	41.6	Victoria *†
Reading ^a				1.32	Vermillion †	84	-2	40.9	Waco †
Bidgway †				1.53	Watertown †	78	-8	33.5	Weatherford †
Saugertown	75	—2	41.0	1.74	Webster †	77	-13	31.4	Wichita Falls †
Salem Corners	66	14	39.6	1.73	Wentworth †	79	-10	31.3	Utah
Salisbury †				2.10	Wessington Spgs †	82	-8	35.0	Blue Creek *†
Seasholtzville				1.40	Tennessee.				Castle Gate †
Selins Grove	74	16	42.6	1.09	Andersonville *†	80	15	51.6	Cisco †
Shinglehouse	72	11	38.8	1.84	Ashwood *†	79	20	53.6	Coalgate †
Smethport	75	7	39.0	1.86	Bolivar *†	74	51.0	57.8	Corinne *†
Smiths' Corners				1.71	Bristol †	81	12	48.5	Deseret †
Somerset	74	8	43.6	1.85	Byrdstown *†	84	11	50.6	Fillmore †
South Eaton	67	14	41.2	0.80	Carthage †				Fort Du Chesne †
State College	69	13	42.7	1.14	Charleston †				Glendale *†
Stoystownt †				1.48	Clarksville	82	17	53.3	Grouse Creek *†
Swarthmore	78	18	46.1	1.34	Clinton †				Heber †
Uniontown	76	16	45.8	2.90	Columbia †				Kelton *†
Warren †				1.87	Covington a†	78	22	54.6	Koosharem
Wellsboro *†	72	10	38.3	0.24	Florence Station *†	79	21	53.5	Levant †
West Chester	77	18	45.1	1.67	Franklin †	82	15	52.3	Loaf †
West Newton †				2.16	Greenvile †	82	12	52.6	Logan †
Weatown	77	18	43.7	1.60	Harriman †	83	15	51.0	Loose †
Wilkesbarre †	70	16	43.8	1.08	Harrogate †	79	17	51.7	Manti †
York †	80	16	45.1	1.58	Hohenwald †	82	12	53.0	Moab †
Rhode Island					Rhode Island.				Mount Pleasant *†
Bristol	58	20	40.2	1.10	Jackson *†	75	20	52.7	Mount Pleasant *†
Kingston	60	14	40.0	1.93	Johnson City †	81	16	51.1	Ogden a†
Lonsdale				1.25	Kingston †				Ogden b†
Newport	64	20	43.8	...	Loudon †				Parowan †
Pawtucket	66	22	41.6	1.19	Lynnville *†	81	19	52.1	Promontory *†
Providence a	66	22	43.7	1.33	Missionary Ridge *†				Provo City *†
Providence c	66	18	40.8	1.43	Newport *†	84	14	49.6	Randolph †
South Carolina.					Nunnelly *†	80	20	54.6	Riefield †
Aiken	88	25	61.4	2.25	Palmetto †				Saint George †
Anderson †				2.17	Parksville *†	80	19	54.5	Scofield †
Blackburg.	83	20	55.9	1.15	Riddleton †	78	20	49.8	Silver Lake *†
Blenheim ^{ss}	23	55.0			Rockwood †				Singletree †
Camden †				1.71	Rogersville *†	81	20	50.3	Snowville †
Central ^a				52.8	Rugby *†	81	20	50.3	Soldier Summit †
Cheraw †	90	23	58.6	1.31	Savannah *†	81	22	56.2	Terrace *†
Cheraw b†				1.87	Springdale *†	84	17	54.6	Thistle †
Clemson College †				2.80	Strawberry Plains †				Vermont.
Conway †				2.81	Trenton	80	19	52.8	Battleboro.
Coronado †				1.58	Tullahoma *†	76	15	48.3	Burlington †
Cross Hill *†	84	22	57.8	2.02	Waynesboro *†	78	16	51.4	Charleston †
Darlington *†	88	22	60.4	...	Wier *†	82	12	51.2	Cloverdale †
Edisto †				2.49	Texas.				Davis †
Evingham †				2.66	Albany *†	85	30	57.0	Elkhorn †
Flint Hill †	86	23	57.2	1.37	Arlington †	91	27	58.0	Ella †
Gaffey †				1.59	Arthur City †				Fairmount †
Georgetown †	86	29	61.3	1.15	Aurora *†	100	26	59.0	Glenville †
Greenvile.				2.30	Austin †	89	32	63.5	Grafton †
Greenwood †				0.93	Belton †	96	30	62.2	Harpers Ferry †
Hollands Store †	86	18	56.0	1.60	Boerne *†	86	27	59.2	Hinton †
Kingtree † b				2.51	Brady †	94	24	59.9	Marlinton †
Little Mountain *†	88	23	59.5	0.71	Brazoria †	86	35	65.6	Martinsburg †
Longshore †	86	20	56.7	1.93	Brenham †	85	39	63.8	Monarch *†
McCormick *†	84	26	57.8	1.71	Burnet *†	86	29	61.2	Morgantown a†
Martins				3.01	Childress †	91	17	54.8	Morgantown b†
Mount Carmel †				1.54	Coldwater †	84	8	44.0	New Martins'let
Pinopolis *†	82	29	59.3	3.49	Coleman.				Parkerhurst †
Port Royal †	82	30	62.7	2.11	Columbus †	84	34	65.4	Philippit.
Reidville	88	22	58.1	1.77	Corsicana a†	86	25	59.6	Pleasant Hill *†
Saint Stephens †				2.78	Corsicana b†	85	24	57.6	Point Pleasant †
Santuck ^a	82	24	56.6	1.86	Cuero †	87	33	65.5	Raleigh †
Simpsonville †	86	19	56.8	3.27	Dallas †	90	25	59.3	Ridgewood †
Society Hill †	88	25	59.7	3.09	Devine †	92	30	63.5	Sandyville *†
Statesburg †	87	26	60.4	2.52	Durham †				Spencer †
Tatum Station *†	86	25	55.9	1.73	Duval *†	91	30	64.0	Tanner *†
Timmonsville *†	85	40	63.6	...	Estelle †	90	23	59.0	Weston a†
Trenton.	87	26	61.4	2.32	Fayette †	86	24	57.4	Weston b†
Trial †	89	26	61.7	2.03	Forestburg †	92	39	70.5	Wheeling a†
Watts ^{ss}	84	22	57.7	1.76	Fort Brown †	88	39	66.7	Wheeling b†
Yorkville	86	20	58.4	1.18	Fort Clark	91	38	66.7	Wisconsin.
South Dakota.					Fort Hancock	86	8	49.0	Amherst.
Aberdeen †	69	-10	33.0	3.97	Fort McIntosh	96	36	70.2	Baraboo †
Alexandria †	86	-5	37.0	1.60	Fort Ringgold †	100	38	70.8	Blackstock †
Ashcroft †	66	-23	27.0	2.60	Fredericksburg *†	91	26	60.2	Butternut †
Brookings †	78	-7	34.2	1.23	Gainesville †	91	25	58.0	Cadiz *†
Castlewood †	76	-8	31.0	0.89	Graham †	94	24	57.6	Centralia.
Cross †	63	-10	31.8	1.88	Guero †	87	20	57.7	Chilcott.
De Smet †	85	-8	35.1	0.90	Dallas †	90	25	59.3	Chippewa Falls †
Faulkton †	68	-14	29.0	5.37	Fort Hancock	86	26	60.2	City Point.
Flandreau †	80	-6	34.6	1.02	Fort McIntosh	96	36	70.2	Clarendon †
Forrestburg †	79	-4	35.6	0.95	Fort Ringgold †	100	38	70.8	Clarksville.
Fort Meade	68	-8	32.7	3.08	Gainesville †	91	25	58.0	Clarendon.
Fort Sully	74	-4	34.8	2.60	Graham †	94	24	57.7	Clarendon.
Frankfort †	74	-13	33.4	3.20	Guero †	87	21	51.4	Clarendon.
Kyle *†					Hartley †	82	11	43.8	Clarendon.
Highland	96	22	58.7	2.35	Hale Center †	92	21	53.7	Clarendon.
Houston †	85	32	62.4	5.01	Halletteville †	85	33	64.2	Clarendon.
Kent.	84	30	62.0	4.35	Hartlettville †	83	21	51.0	Clarendon.
Lakeview					Hartley †	82	11	43.8	Clarendon.
Lexington †					Hartlettville †	82	10	47.2	Clarendon.
Marion †					Hartlettville †	84	11	46.9	Clarendon.
Nottoaway					Hartlettville †	84	12	48.2	Clarendon.
Petersburg †					Hartlettville †	85	16	52.5	Clarendon.
Richmond a†					Hartlettville †	86	17	51.6	Clarendon.
Richmond b†					Hartlettville †	87	15	53.6	Clarendon.
Riverton †					Hartlettville †	88	18	50.3	Clarendon.
Salem †					Hartlettville †	89	18	51.1	Clarendon.
Saluda †					Hartlettville †	90	18	51.4	Clarendon.
Spottsville †					Hartlettville †	91	18	52.0	Clarendon.
Standardsville †					Hartlettville †	92	15	53.6	Clarendon.
Staunton †					Hartlettville †	93	15	54.0	Clarendon.
Stephens City †					Hartlettville †	94	16	47.6	Clarendon.

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean			Max.	Min.	Mean	
Texas—Cont'd.	0	0	0	Ins.	Llano *†*	94	29	60.6	0.90	Virginia—Cont'd.	0	0	0	Ins.
Luling †	76	32	65.1	0.72	Longview †</td									

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Wisconsin—Cont'd.	0	0	0	Ins.
Lancaster ^t	79	5	36.6	2.09
Lincoln ^t.....	.....	.....	36.4	2.09
Madison ^t	72	8	38.3	1.73
Manitowoc ^t	57	8	35.3	2.39
Meadow Valley ^t	71	5	34.1	1.16
Medford ^t.....	.....	.....	2.20	
Medford ^b	66	—5	32.5	1.95
Menomonie.....	77	—3	31.3	3.02
Neillsville ^t	72	2	34.8	1.64
New Holstein ^t	73	9	37.8	3.59
Oconomowoc ^t	72	8	40.3	1.53
Oconto.....	71	8	36.0	2.13
Osceola ^t	73	—2	31.6	2.80
Oshkosh ^t	70	8	39.1	1.68
Pepin.....	81	1	34.6	1.57
Portage ^t.....	.....	.....	1.83	
Port Washington.....	62	8	37.5	3.65
Prairie du Chien.....	82	1	37.8	1.99
Racine ^{*v}	60	5	36.6	.....
Raymond.....	75	9	39.1	2.70
Reedsburg ^t	76	8	38.8	1.97
Sharon ^t	75	7	39.0	3.65
Shawano.....	66	4	35.4	1.31
Sheboygan ^{*v}	55	8	37.2	.....
Stevens Point ^t	66	4	36.0	0.95
Valley Junction ^t	77	4	37.5	1.39
Viroqua.....	74	3	36.4	3.13
Watertown ^t	75	2	37.2	1.13

Reports received too late to be used in general discussion of weather for March, 1894.

California.	Massachusetts.	Oregon.	South Dakota.
Cloverdale ^{*v}	75	34	54.3
Colorado.	.....	0.02	2.35
Garnett.....	67	7	38.6
Glen Eyrie ^t.....	.....	1.36	2.59
Springfield ^t.....	.....	0.00	.....
Georgia.	.....	.....	.....
Griffin ^t	85	.....	5.85
Kansas.	.....	.....	.....
Ellis ^{*v}	80	12	46.1
Wa Keeney ^{*v}	80	16	42.2
			0.05

Received too late for publication in February, 1894.

California.	New York.	Utah.
Point George L. H.	4.57	.....
Wenrich Ranch	1.46	.....
Colorado.	.....	.....
La Porte	0.60	.....
Kansas.	.....	0.50
Beloit ^t.....	.....	0.50
Ness City ^t.....	.....	0.85
Mississippi.	.....	.....
Logtown ^t	768	308
Missouri.	52.28	11.61
Warrensburg ^{*v}	58	1
	29.5	1.52

EXPLANATION OF SIGNS.

*Extremes of temperature from observed readings of dry thermometer.
† Weather Bureau instruments.

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

1 Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4.

2 Mean of 8 a. m. + 8 p. m. + 2.

3 Mean of 7 a. m. + 7 p. m. + 2.

4 Mean of 6 a. m. + 6 p. m. + 2.

5 Mean of 7 a. m. + 2 p. m. + 2.

6 Mean from readings at various hours reduced to true daily mean by special tables.

7 Mean from hourly readings of thermograph.

8 Mean of 7 a. m. + 2 p. m. + 9 p. m. + 3.

9 Mean of sunrise, noon, sunset, and midnight.

10 Mean of 8 a. m. + 8 p. m. + 2.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

An italic letter following the name of a station, as "Livingston a," "Livingston b," indicates that two or more observers, as the case may be, are reporting from the same station. A small Roman letter following the name of a station, or in figure columns, indicates the number of days missing from the record; for instance, "14" denotes 14 days missing.

No note is made of breaks in the continuity of temperature records when the same do not exceed two days. All known breaks, of whatever duration, in the precipitation record receive appropriate notice.

TABLE III—Data from Canadian stations for the month of March, 1894.

Station.	Pressure.			Temperature.	Precipitation.	Prevailing direction of wind.
	Mean not reduced.	Mean reduced.	Departure from normal.			
Saint Johns, N. F.	Inches.	Inches.	Inches.	°	°	Inches.
Sydney, N. S.	29.72	29.87	+ .04	28.8	+ 2.8	5.51
Grindstone, G. S. L.	29.92	29.98	+ .11	5.82	+ 0.57	n. nw.
Sandy Point, N. F. ....	.....	.....	.....	.....	.....	.....
Halifax, N. S.	29.88	30.02	+ .13	32.3	+ 3.8	3.52
Grand Manan, N. B.	29.96	30.01	+ .05	34.1	+ 3.2	2.68
Yarmouth, N. S.	29.95	30.03	+ .15	34.2	+ 3.2	2.25
Saint Andrews, N. B.	29.93	29.98	+ .05	32.5	+ .97	2.42
Charlottetown, P. E. I.	29.94	29.98	+ .04	29.3	+ 1.4	1.27
Chatham, N. B.	29.96	29.98	+ .08	27.2	+ 6.2	2.48
Father Point, Que.	29.92	29.95	+ .05	26.8	+ 7.3	1.15
Quebec, Que.	29.65	29.99	+ .34	26.0	+ 8.0	4.04
Montreal, Que.	29.78	30.00	+ .04	31.4	+ 9.4	2.19
Rockliffe, Ont.	29.44	29.97	+ .01	26.3	+ 10.3	1.90
Kingston, Ont.	29.69	30.02	+ .02	33.5	+ 9.5	2.00
Toronto, Ont.	29.64	30.04	+ .01	34.9	+ 9.4	1.37
White River, Ont.	28.55	29.98	+ .43	18.2	+ 5.2	0.39
Port Stanley, Ont.	29.39	30.06	+ .03	34.4	+ 1.62	1.33
Parry Sound, Ont.	29.27	30.00	+ .03	31.0	+ 12.5	3.18
Port Arthur, Ont.	29.20	29.93	+ .15	23.1	+ 9.1	1.53
Winnipeg, Man.	29.10	29.98	+ .14	17.2	+ 6.7	1.63
Minnedosa, Man.	28.06	29.97	+ .12	13.8	+ 3.8	0.88
Qu'Appelle, Assiniboinia.	27.62	30.00	+ .07	15.5	+ 0.5	1.29
Medicine Hat, Assiniboinia.	27.56	29.95	+ .08	26.2	+ 1.3	0.99
Swift Current, Assiniboinia. ....	.....	.....	.....	.....	.....	.....
Calgary, Alberta.	26.27	29.94	+ .10	24.0	+ 3.0	0.67
Prince Albert, Sask. ....	.....	.....	.....	.....	.....	.....
Edmonton, Alberta.	27.50	29.95	+ .03	19.4	+ 6.6	0.70
Battleford, Saskatchewan.	28.14	29.99	.....	10.4	.....	0.70
Spences Bridge, B. C.	29.05	29.90	.....	38.9	.....	0.19
Hamilton, Bermuda.	30.00	30.16	+ .08	64.2	.....	2.39
January, 1894.	.....	.....	.....	.....	.....	.....
Sandy Point, N. F.	29.86	29.88	19.4	6.67
February, 1894.
Sandy Point, N. F.	29.86	29.88	13.8	4.79

nw.

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TABLE IV.—*Hourly sunshine as deduced from sunshine recorders, March, 1894.*

Stations.	Instrument.	Percentage for each hour of local mean time ending with the respective hour.																Monthly summary.		
		A. M.								P. M.								Instrumental record.		
		5	6	7	8	9	10	11	Noon.	1	2	3	4	5	6	7	8	Actual.	Possible.	Per cent of possible.
																		Hours.	Hours.	Personal estimate.
Baltimore, Md.	T.	25	37	46	66	73	73	75	79	80	76	78	62	46	39	39	245.1	371.5	66	57
Boston, Mass.	T.	33	45	47	52	68	73	76	77	73	62	59	54	36	21	21	322.0	369.7	66	48
Buffalo, N. Y.	T.	50	24	26	46	48	57	71	79	79	71	61	47	34	13	13	197.0	370.4	53	39
Chicago, Ill.	T.	25	18	35	50	61	66	65	64	65	61	54	50	34	19	19	190.6	371.4	52	51
Cincinnati, Ohio	P.	50	58	53	55	51	55	55	61	59	59	62	58	47	24	24	206.7	370.3	56	51
Cleveland, Ohio	P.	50	41	54	58	51	56	52	65	65	73	74	63	57	46	46	219.6	371.2	58	45
Colorado Springs, Colo.	T.	25	37	50	68	83	87	85	80	81	73	63	57	50	39	39	251.5	370.7	64	50
Columbus, Ohio	T.	33	43	48	59	68	71	72	74	75	73	69	66	55	50	30	256.8	372.2	64	50
Denver, Colo.	P.	33	57	74	73	77	80	85	79	74	75	76	69	55	48	48	270.0	370.0	74	49
Des Moines, Iowa	T.	83	55	45	56	60	71	71	72	74	73	72	56	40	32	32	229.2	370.9	62	51
Detroit, Mich.	T.	25	29	45	59	70	80	83	80	82	75	65	61	53	23	23	241.7	369.2	66	45
Dodge City, Kans.	P.	35	46	66	82	88	83	79	70	85	82	76	72	55	40	40	273.6	371.6	74	62
Eastport, Me.	P.	43	20	40	51	57	67	68	69	69	63	58	54	35	35	35	203.2	373.3	54	54
Galveston, Tex.	P.	33	60	66	74	77	77	81	77	77	75	68	66	51	35	35	259.5	370.5	70	63
Kansas City, Mo.	P.	79	71	74	78	85	88	85	80	78	84	86	90	83	83	83	304.2	373.6	82	62
Key West, Fla.	T.	50	45	48	61	57	69	69	69	67	63	64	49	46	32	32	225.0	372.2	60	45
Louisville, Ky.	T.	25	42	63	64	66	74	75	68	68	68	61	45	26	11	11	222.5	371.7	60	47
Memphis, Tenn.	P.	40	48	53	59	67	69	67	64	65	55	59	65	61	46	46	226.6	371.7	61	58
New Haven, Conn.	T.	50	27	42	63	70	75	78	80	72	70	65	50	33	17	17	224.2	370.8	61	40
New Orleans, La.	T.	67	29	29	49	59	64	58	65	64	66	63	55	53	40	40	204.0	372.8	55	54
New York, N. Y.	T.	8	23	44	65	75	75	75	78	75	72	67	47	20	15	15	221.0	371.0	60	46
Philadelphia, Pa.	T.	75	52	64	71	69	73	81	77	72	67	65	62	55	30	30	250.0	370.5	68	57
Portland, Me.	T.	62	20	46	59	68	73	78	81	83	74	69	54	35	12	12	228.5	369.8	62	45
Portland, Oreg.	P.	27	24	24	21	23	25	21	22	26	23	27	24	22	33	33	89.2	371.0	24	25
Rochester, N. Y.	T.	45	43	69	82	87	86	83	86	87	86	77	63	41	41	41	276.1	371.6	75	41
Saint Louis, Mo.	T.	50	30	33	42	57	69	80	78	68	65	57	39	20	20	20	197.9	370.7	53	40
Salt Lake City, Utah	T.	0	24	34	47	60	70	63	75	79	67	62	64	39	49	49	212.4	370.5	57	53
San Diego, Cal.	P.	30	67	79	85	86	82	81	75	78	80	83	77	56	41	41	286.6	371.7	77	63
San Francisco, Cal.	P.	67	61	62	68	76	77	74	67	76	74	75	69	52	54	54	258.1	372.5	69	59
Santa Fe, N. Mex.	P.	67	42	39	58	70	90	82	81	74	77	69	58	47	39	39	246.0	373.4	66	59
Savannah, Ga.	P.	33	48	58	65	67	61	69	70	72	67	65	52	58	57	57	232.9	370.5	63	60
Tucson, Ariz.	T.	42	43	43	52	64	74	77	76	74	69	68	59	47	39	39	230.8	371.5	62	64
Vicksburg, Miss.	T.	33	48	58	65	67	61	69	70	72	67	65	52	58	57	57	229.0	370.5	63	60
Washington, D. C.	P.	33	48	58	65	67	61	69	70	72	67	65	52	58	57	57	228.0	370.5	63	60
Wilmington, N. C.	T.	42	43	43	52	64	74	77	76	74	69	68	59	47	39	39	227.0	371.5	62	64

TABLE V.—Mean temperature for each hour of seventy-fifth meridian time, March, 1894.

Stations.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	Noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	Midnight.	Mean.	
Abilene, Tex.	53.2	52.4	51.7	50.8	49.6	48.9	48.0	48.1	49.6	52.6	55.9	58.9	61.8	63.6	66.0	67.5	68.3	68.0	66.0	63.2	60.0	57.5	55.7	57.1	
Albany, N.Y.	36.5	35.9	35.8	35.3	35.4	35.2	35.2	36.3	37.5	39.3	41.1	42.9	43.8	44.7	44.7	44.4	43.6	42.4	41.3	40.3	39.4	38.7	38.3	37.5	
Alpena, Mich.	32.8	32.2	31.6	31.0	30.7	30.3	30.5	31.2	32.6	33.8	35.1	36.3	37.3	38.5	38.5	38.5	38.5	37.9	36.7	35.7	34.7	33.5	33.3	34.2	
Amarillo, Tex.	43.5	42.2	40.9	39.9	38.6	37.5	36.5	35.6	35.8	39.7	44.0	47.7	50.8	53.1	54.6	56.0	57.1	57.1	56.5	54.4	50.8	48.1	46.4	45.1	
Atlanta, Ga.	53.5	52.7	51.6	50.9	50.1	49.7	49.6	49.8	51.4	54.7	57.4	60.2	61.4	62.8	64.0	64.8	64.7	63.6	61.6	59.8	58.1	57.2	56.2	55.7	
Augusta, Ga.	56.7	55.7	55.2	54.3	53.6	52.9	52.2	52.9	55.0	58.6	61.7	64.3	66.1	67.3	68.4	69.3	68.4	66.8	63.4	62.5	61.0	59.6	55.2	60.6	
Baker City, Oreg.	33.5	32.7	31.7	31.2	30.5	30.2	29.8	29.7	30.1	31.7	33.6	35.4	37.5	38.9	39.6	40.1	40.2	39.0	39.0	37.7	36.7	36.0	34.6	34.6	
Baltimore, Md.	44.7	43.8	43.1	42.3	41.7	41.2	41.2	43.1	45.2	47.8	50.0	51.4	52.6	54.4	55.0	54.7	53.5	52.5	51.1	50.0	49.0	48.1	47.2	47.9	
Bismarck, N. Dak.	24.2	23.9	23.4	22.7	21.9	21.2	20.8	19.9	20.2	21.7	24.1	26.7	28.3	30.2	31.5	32.0	31.7	31.9	30.8	28.9	26.7	25.5	24.6	23.9	
Boston, Mass.	39.1	38.8	38.6	38.1	37.9	38.0	39.2	41.1	42.8	44.7	46.0	47.3	47.5	47.3	46.6	44.8	44.1	43.0	41.9	40.4	39.9	39.6	39.6	41.9	
Buffalo, N.Y.	37.7	37.3	36.9	36.6	36.3	36.4	36.1	36.9	37.8	38.5	39.5	41.0	41.8	42.0	42.0	41.9	41.8	41.5	40.6	39.8	38.8	38.0	38.1	39.0	
Charleston, S.C.	57.2	56.6	55.5	55.0	55.6	54.9	56.3	59.0	61.8	64.3	66.2	66.4	67.4	68.2	69.5	68.7	68.4	68.0	65.8	65.8	65.7	65.8	60.2	60.2	
Charlotte, N.C.	52.5	51.5	50.6	49.6	48.8	48.2	47.8	49.0	50.8	53.8	55.5	57.7	60.0	62.2	63.3	63.9	64.0	62.9	61.0	59.4	57.8	56.8	55.5	55.8	
Cheyenne, Wyo.	30.3	29.5	28.6	27.8	27.8	27.5	27.2	26.7	28.1	31.4	34.6	37.0	38.5	39.7	41.1	41.6	41.5	40.6	39.2	37.2	34.6	33.4	32.2	31.3	33.6
Chicago, Ill.	39.9	39.4	38.9	38.1	37.5	37.1	36.8	37.4	38.4	39.0	41.1	42.5	43.5	44.4	45.1	45.7	44.9	43.9	43.2	42.1	41.5	40.8	40.3	41.4	
Cincinnati, Ohio	46.6	45.6	44.9	44.3	43.4	42.6	42.0	42.6	44.0	46.1	48.4	50.7	52.3	53.5	54.6	55.4	55.2	54.7	53.6	52.2	50.8	49.8	48.8	47.8	48.7
Cleveland, Ohio	40.3	40.0	39.6	39.0	38.7	38.3	37.4	38.2	39.2	41.5	44.5	44.8	45.9	46.0	47.2	47.3	46.6	44.8	43.9	43.5	42.7	41.5	40.6	42.4	
Colorado Spgs, Colo.	33.3	33.5	32.8	31.9	31.5	29.9	29.1	28.7	29.0	32.4	36.9	40.2	42.9	44.9	46.1	48.8	47.0	45.9	43.6	40.8	38.6	36.3	34.8	37.7	
Columbus, Ohio	42.9	42.2	41.5	41.1	40.3	39.6	39.4	40.1	42.0	43.9	46.3	48.1	50.3	51.5	52.8	53.3	53.1	52.2	50.4	49.0	47.3	46.5	44.3	46.0	
Denver, Colo.	38.2	37.3	36.5	35.7	34.5	33.6	32.8	31.9	32.0	34.3	38.1	41.9	44.9	47.0	48.2	49.7	50.5	47.8	45.3	43.0	40.8	39.1	41.0		
Des Moines, Iowa	40.0	39.5	38.7	37.8	37.3	36.6	35.7	34.9	35.8	38.2	40.6	43.5	46.1	47.9	49.0	49.8	49.5	49.3	48.3	46.1	44.9	43.7	42.3	41.3	42.4
Detroit, Mich.	38.8	37.9	37.5	37.1	36.5	35.9	35.7	37.4	38.2	39.2	41.5	44.5	44.8	45.9	46.0	47.2	47.3	46.6	44.6	42.2	41.3	40.6	39.9	39.3	40.4
Dodge City, Kans.	40.7	39.3	38.4	37.3	36.1	35.0	34.1	33.7	35.0	40.8	43.5	49.2	52.5	54.7	56.8	58.4	56.4	55.8	53.9	51.5	49.9	47.1	44.9	42.3	45.4
Duluth, Minn.	28.6	27.7	26.9	26.5	26.0	25.7	25.3	25.4	26.5	28.1	29.4	30.2	31.1	31.7	32.4	32.4	32.2	31.9	31.5	31.0	30.5	29.6	28.9	29.0	
Eastport, Me.	31.6	31.5	31.3	30.8	30.5	31.2	31.8	32.9	34.1	34.7	35.4	35.9	36.3	36.2	36.0	35.5	35.5	34.8	34.2	33.5	32.9	32.2	33.4		
El Paso, Tex.	50.7	49.1	47.5	46.0	44.9	43.6	43.2	42.8	43.1	46.5	50.5	54.1	57.3	60.2	62.8	63.8	64.9	65.0	64.8	63.0	59.3	56.6	54.5	52.8	53.6
Fort Smith, Ark.	52.1	51.5	50.6	49.8	49.0	48.4	48.0	49.7	52.3	55.0	57.4	59.4	61.1	62.2	63.3	64.0	61.9	60.1	58.4	57.0	55.3	54.0	55.5		
Galveston, Tex.	61.4	61.4	60.9	60.8	60.6	60.5	60.3	61.0	62.0	62.9	63.8	64.5	64.9	65.2	65.4	65.9	63.9	63.3	63.0	62.3	62.0	61.9	62.5		
Grand Haven, Mich.	36.9	35.9	36.0	35.8	35.9	36.0	35.7	35.8	37.1	38.4	39.6	40.0	40.4	40.3	41.1	41.1	40.4	39.7	38.8	38.1	37.5	38.3			
Havre, Mont.	25.0	24.5	23.6	22.9	22.5	22.0	21.2	20.8	22.7	26.0	28.4	30.4	32.2	34.3	35.4	35.9	36.3	36.2	35.5	34.8	33.5	32.5	32.2	33.4	
Helena, Mont.	29.3	29.0	28.1	27.9	27.3	27.2	26.7	25.8	25.5	26.5	28.1	29.4	30.3	32.0	34.3	34.5	34.9	35.4	34.9	33.6	32.0	31.0	30.2	30.8	
Huron, S.Dak.	29.0	28.2	27.2	26.8	26.0	25.9	25.7	27.2	29.0	30.3	33.0	35.7	38.3	40.1	41.4	41.9	41.1	39.2	36.7	34.1	32.3	30.5	30.2	32.8	
Indianapolis, Ind.	45.1	44.5	43.6	42.4	42.0	41.3	41.6	43.5	45.7	48.0	49.6	51.5	52.6	53.5	54.1	53.3	51.6	50.1	48.9	48.0	47.1	46.3	45.7		
Jacksonville, Fla.	61.2	60.4	59.8	59.3	58.8	58.5	58.4	59.9	62.2	65.2	67.6	69.3	71.0	71.7	72.3	72.8	70.8	69.0	66.8	65.0	63.9	62.6	61.9	64.6	
Kansas City, Mo.	44.9	44.3	43.6	42.6	42.0	40.7	40.2	40.8	42.9	45.6	48.3	50.4	52.5	53.6	54.4	54.9	53.4	51.9	50.1	48.9	47.3	46.3	47.2		
Key West, Fla.	71.6	71.5	71.4	71.3	71.0	71.3	72.7	74.1	75.1	76.1	76.5	76.6	76.7	76.4	76.0	75.5	74.5	73.2	72.5	72.3	72.0	71.8	71.7	73.5	
Knoxville, Tenn.	50.2	49.3	48.3	47.5	46.6	45.8	45.2	45.8	48.1	51.1	53.5	54.7	56.4	58.1	60.0	61.3	62.2	61.3	59.8	58.2	57.8	56.8	55.7		
Lander, Wyo.	29.0	28.7	27.6	27.0	26.8	26.0	25.9	25.5	27.0	29.7	32.0	34.3	36.0	37.7	39.4	40.4	40.2	39.7	38.7	37.7	36.6	35.7	34.2		
Little Rock, Ark.	54.0	52.3	51.1	50.3	49.7	48.8	48.6	49.9	51.1	52.3	54.9	57.1	58.7	60.5	61.4	61.1	61.6	61.1	60.2	58.7	57.9	56.8	55.4		
Louisville, Ky.	48.3	47.5	46.8	45.3	44.1	43.1	42.7	43.1	44.7	47.0	50.4	52.1	54.7	56.3	58.3	59.1	59.9	57.7	55.7	53.1	51.8	50.9			
Lynchburg, Va.	46.2	45.4	44.5	43.7	43.1	42.5	42.5	44.6	48.1	51.4	54.2	56.3	58.6	60.9	62.1	61.3	61.1	60.1	57.4	54.5	52.3	50.7	49.5		
Marquette, Mich.	29.6	30.0	29.5	29.3	29.0	28.5	28.4	29.4	30.4	30.5	31.2	34.5	35.2	36.2	37.4	38.6	39.3	39.5	38.0	37.3	36.0	35.7	34.9		
Memphis, Tenn.	53.5	54.6	51.9	50.9	49.9	50.0	50.9	50.3	51.5	54.4	57.7	59.0	60.1	61.1	61.6	61.1	61.5	60.0	58.4	57.3	56.3	55.6	54.7		
Milwaukee, Wis.	37.2	36.8	36.5	36.0	35.8	35.5	35.2	35.5	36.0	37.3	39.2	40.9	41.4	42.9	43.3	43.5	42.7	41.0	39.5	38.8	38.0	37.8	39.0		
Montgomery, Ala.	56.9	56.1	55.0	54.5	53.8	53.6	53.5	53.6	53.9	56.0	63.5	67.9	70.7	73.0	76.8	78.2	76.8	75.5	73.4	70.8	68.2	66.0	66.0		
Moorehead, Minn.	24.8	24.3	23.4	22.8	22.4	21.9	21.6	21.7	23.2	24.9	26.9	29.0	30.8	32.2	33.5	33.3	32.9	31.8	30.1	28.6	27.5	26.0	25.0		
Nantucket, Mass.	37.5	37.3	37.4	37.3	37.4	37.4	38.2	39.1	40.1	41.6	42.3	41.8	42.1												

TABLE VI.—Mean pressure for each hour of seventy-fifth meridian time, March, 1894.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.		
Abilene, Tex.	.28.200	.214	.213	.211	.206	.209	.222	.233	.242	.248	.251	.250	.235	.214	.184	.158	.140	.129	.132	.141	.157	.175	.191	.200	.198	
Albany, N. Y.	.29.998	.989	.990	.994	.001	.011	.018	.024	.020	.010	.009	.008	.005	.001	.005	.001	.005	.003	.006	.008	.002	.001	.001	.001	.007	
Alpena, Mich.	.29.311	.310	.301	.293	.297	.299	.309	.314	.310	.308	.305	.297	.286	.277	.270	.265	.267	.269	.275	.282	.288	.300	.302	.299	.294	
Atlanta, Ga.	.28.959	.959	.953	.952	.959	.958	.982	.996	.006	.013	.011	.005	.086	.968	.948	.935	.933	.937	.944	.952	.959	.961	.963	.962	.967	.965
Augusta, Ga.	.29.973	.971	.963	.957	.970	.983	.995	.002	.005	.005	.005	.979	.958	.929	.929	.920	.922	.931	.941	.955	.966	.966	.973	.974	.965	
Baltimore, Md.	.29.925	.920	.915	.917	.924	.934	.945	.951	.949	.946	.935	.921	.895	.874	.866	.859	.865	.870	.881	.893	.898	.903	.907	.914	.909	
Bismarck, N. Dak.	.28.119	.113	.113	.107	.100	.099	.100	.107	.112	.117	.115	.109	.105	.101	.095	.092	.095	.103	.100	.119	.126	.132	.135	.134	.111	
Boston, Mass.	.29.930	.929	.925	.924	.931	.937	.945	.949	.947	.943	.931	.922	.901	.893	.885	.884	.891	.896	.908	.915	.921	.921	.923	.920	.920	
Buffalo, N. Y.	.29.290	.287	.280	.279	.284	.290	.300	.305	.311	.310	.306	.297	.282	.270	.264	.258	.259	.263	.272	.280	.282	.281	.276	.284	.284	
Chicago, Ill.	.29.111	.109	.103	.100	.098	.106	.117	.125	.127	.132	.130	.121	.114	.098	.082	.075	.073	.074	.081	.087	.094	.101	.110	.111	.103	
Cincinnati, Ohio	.29.412	.410	.405	.402	.405	.415	.430	.447	.452	.455	.450	.443	.426	.406	.392	.384	.385	.389	.395	.403	.410	.410	.414	.412	.415	
Cleveland, Ohio	.29.251	.249	.244	.243	.248	.256	.265	.266	.268	.269	.267	.259	.248	.228	.223	.217	.222	.231	.239	.244	.246	.245	.244	.245	.245	
Colorado Spgs., Colo.	.23.929	.929	.931	.927	.917	.915	.919	.926	.932	.933	.933	.925	.916	.908	.891	.880	.866	.878	.897	.911	.922	.933	.937	.931	.913	
Columbus, Ohio	.29.164	.162	.156	.151	.155	.162	.173	.185	.188	.191	.188	.185	.169	.151	.130	.128	.128	.134	.141	.152	.157	.159	.161	.158	.160	
Denver, Colo.	.24.673	.666	.662	.660	.654	.648	.648	.652	.661	.668	.672	.674	.669	.660	.644	.631	.621	.616	.618	.628	.642	.659	.677	.653	.653	
Des Moines, Iowa	.29.045	.049	.053	.048	.049	.053	.061	.066	.071	.071	.067	.062	.047	.032	.017	.005	.001	.002	.008	.022	.030	.037	.046	.045	.041	
Detroit, Mich.	.29.244	.245	.236	.232	.236	.239	.249	.254	.257	.261	.250	.249	.235	.221	.214	.212	.208	.212	.219	.228	.236	.240	.238	.236	.236	
Dodge City, Kans.	.27.350	.351	.354	.348	.346	.340	.351	.350	.361	.361	.351	.351	.341	.337	.330	.327	.315	.309	.313	.325	.346	.353	.354	.350	.350	
Duluth, Minn.	.29.178	.179	.178	.176	.174	.177	.181	.188	.194	.193	.187	.186	.184	.170	.167	.171	.178	.186	.188	.188	.188	.188	.184	.182	.182	
Eastport, Me.	.29.910	.906	.907	.910	.918	.929	.939	.948	.950	.940	.935	.921	.906	.890	.884	.882	.886	.893	.905	.908	.907	.900	.898	.911	.911	
El Paso, Tex.	.26.199	.203	.205	.201	.195	.193	.200	.211	.224	.234	.238	.240	.228	.212	.188	.162	.148	.135	.135	.142	.155	.173	.187	.196	.192	
Galveston, Tex.	.30.064	.062	.054	.045	.039	.015	.059	.069	.083	.089	.095	.092	.078	.060	.040	.025	.015	.017	.022	.027	.039	.053	.057	.061	.054	
Grand Haven, Mich.	.29.301	.303	.300	.295	.293	.293	.298	.306	.312	.309	.303	.302	.299	.290	.280	.272	.269	.270	.275	.280	.282	.286	.290	.293	.292	
Havre, Mont.	.27.297	.294	.286	.284	.275	.271	.275	.277	.285	.287	.285	.281	.271	.265	.257	.256	.257	.261	.269	.273	.284	.293	.300	.290	.290	
Helena, Mont.	.25.719	.719	.715	.716	.700	.704	.716	.723	.731	.727	.724	.716	.707	.694	.691	.694	.696	.702	.714	.719	.720	.720	.712	.712	.712	
Huron, S. Dak.	.28.540	.541	.541	.532	.529	.528	.532	.530	.530	.529	.524	.519	.508	.499	.487	.486	.483	.487	.495	.511	.523	.541	.545	.519	.519	
Indianapolis, Ind.	.29.235	.240	.237	.235	.238	.247	.251	.261	.268	.278	.279	.277	.267	.256	.241	.225	.220	.213	.214	.218	.221	.227	.230	.234	.241	
Jacksonville, Fla.	.30.131	.126	.117	.115	.122	.130	.149	.159	.168	.172	.165	.153	.140	.107	.091	.084	.085	.085	.101	.115	.129	.137	.139	.138	.127	
Kansas City, Mo.	.28.993	.997	.989	.986	.983	.987	.994	.000	.013	.019	.021	.018	.008	.992	.971	.959	.954	.955	.961	.970	.985	.994	.997	.989	.989	
Key West, Fla.	.30.145	.132	.119	.113	.115	.125	.139	.158	.169	.175	.178	.169	.153	.135	.121	.108	.104	.109	.121	.134	.146	.157	.158	.158	.159	
Knoxville, Tenn.	.29.095	.093	.090	.091	.093	.096	.106	.118	.129	.139	.144	.134	.122	.095	.076	.060	.051	.055	.065	.073	.083	.091	.093	.097	.097	
Little Rock, Ark.	.29.756	.759	.759	.759	.754	.751	.771	.784	.779	.797	.805	.810	.805	.797	.765	.739	.725	.720	.723	.726	.728	.742	.750	.753	.760	
Louisville, Ky.	.29.523	.522	.517	.515	.523	.523	.532	.551	.566	.576	.579	.577	.565	.549	.530	.512	.503	.496	.499	.500	.505	.514	.520	.527	.530	
Lynchburg, Va.	.29.400	.406	.405	.405	.405	.412	.424	.437	.442	.442	.435	.425	.412	.397	.390	.350	.341	.345	.359	.373	.385	.391	.392	.392	.395	
Marquette, Mich.	.29.111	.106	.098	.090	.092	.099	.103	.108	.109	.114	.114	.114	.104	.101	.095	.096	.097	.103	.112	.115	.118	.117	.113	.106	.106	
Memphis, Tenn.	.29.755	.756	.753	.751	.757	.765	.784	.798	.810	.814	.817	.805	.789	.765	.745	.729	.720	.719	.726	.733	.745	.751	.748	.762	.762	
Milwaukee, Wis.	.29.243	.246	.247	.251	.251	.258	.266	.267	.271	.288	.295	.293	.285	.271	.251	.225	.219	.215	.218	.226	.229	.230	.236	.243	.243	
Moorhead, Minn.	.28.905	.907	.904	.903	.907	.913	.912	.911	.909	.915	.915	.915	.902	.890	.882	.875	.875	.879	.884	.891	.891	.908	.914	.900	.900	
Nantucket, Mass.	.30.087	.084	.078	.075	.082	.089	.095	.094	.099	.094	.090	.081	.068	.054	.047	.045	.047	.050	.058	.062	.070	.072	.074	.074	.074	
Nashville, Tenn.	.29.520	.520	.516	.517	.522	.537	.553	.564	.573	.577	.571	.564	.539	.512	.495	.485	.480	.479	.483	.493	.500	.507	.513	.514	.522	
New Haven, Conn.	.29.973	.964	.960	.962	.968	.979	.987	.992	.993	.984	.972	.958	.935	.926	.910	.907	.915	.920	.932	.945	.954	.956	.956	.955	.954	
New Orleans, La.	.30.068	.065	.062	.054	.052	.053	.060	.076	.090	.095	.105	.115	.118	.112	.098	.079	.050	.046	.038	.040	.045	.052	.061	.072	.072	
New York, N. Y.	.29.924	.920	.912	.911	.915	.921	.930	.936	.937	.934	.924	.913	.894	.873	.866	.863	.867	.878	.889	.896	.903	.907	.907	.904	.904	
Norfolk, Va.	.30.079	.073	.065	.065	.074	.086	.099	.107	.112	.109	.100	.086	.062	.041	.030	.023	.027	.031	.046	.059	.070	.075	.077	.074	.070	
Omaha, Neb.	.28.798	.800	.806	.806	.806	.812	.814	.818	.813	.811	.805	.794	.775	.758	.751	.746	.749	.758	.762	.775	.782	.791	.798	.789	.789	
Philadelphia, Pa.	.30.001	.000	.994	.994	.002	.009	.020	.026	.027	.025	.015	.008	.975	.960	.948	.935	.944	.944	.943	.944	.947	.947	.948	.947	.947	
Pikes Peak, Colo.	.17.546	.541	.532	.520	.507	.502	.510	.522	.533	.542	.555	.565	.566	.567	.572	.573	.571	.571	.571	.571	.571	.567	.564	.547	.547	
Pittsburgh, Pa.	.29.210	.207	.205	.203	.208	.214	.220	.222	.223	.215	.207	.190	.171	.143	.157	.160	.170	.178	.180	.190	.197	.198	.201	.196	.196	
Portland, Oreg.	.29.869	.871	.869	.866	.866																					

TABLE VII.—Average wind movement for each hour of seventy-fifth meridian time, March, 1894.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.									
Abilene, Tex.	10.6	11.7	12.7	11.9	11.8	12.1	11.7	11.0	10.1	12.0	14.9	14.9	15.5	14.8	14.5	13.8	13.3	11.9	10.6	10.7	10.7	10.8	10.8	10.8	12.6									
Albany, N. Y.	7.5	7.6	7.7	7.3	7.5	7.5	7.8	8.3	9.3	10.1	10.4	10.9	11.9	11.6	10.4	10.0	9.2	7.7	7.8	8.2	8.5	8.1	9.1	9.1	9.1									
Alpena, Mich.	10.0	10.1	10.2	10.4	11.0	11.3	11.2	11.4	12.7	13.0	14.6	15.3	15.0	15.6	15.4	14.6	14.1	13.3	12.2	10.8	10.5	10.4	10.3	12.3	19.3									
Amarillo, Tex.	18.5	18.5	17.6	17.3	17.4	16.1	15.7	15.9	16.4	18.1	21.7	22.2	21.7	22.1	22.3	22.0	21.6	22.5	22.3	20.0	18.5	18.5	18.9	19.3	19.3									
Atlanta, Ga.	9.8	10.4	9.8	9.5	9.3	9.2	8.9	8.7	8.6	9.4	10.4	11.1	11.9	11.7	11.3	11.7	9.4	9.6	10.0	10.0	10.0	10.0	10.5	10.2	10.2									
Atlantic City, N. J.	10.5	10.2	10.1	10.4	10.3	9.2	9.1	9.4	10.6	11.6	12.6	13.7	13.0	13.9	14.2	13.8	14.5	12.9	12.5	11.7	11.7	11.2	10.8	10.4	11.6									
Augusta, Ga.	4.4	4.2	3.8	3.6	3.8	4.0	3.7	4.0	5.3	6.2	6.8	7.8	9.8	10.1	10.0	9.6	9.4	6.7	5.5	4.6	4.3	4.2	4.5	6.0	6.0	6.0								
Baker City, Oreg.	6.1	6.5	6.8	6.7	6.9	6.4	6.9	7.3	6.4	6.5	6.6	6.3	6.4	6.8	6.9	7.8	7.7	8.0	8.2	6.4	5.8	5.8	5.8	6.7	6.7	6.7	6.7							
Baltimore, Md.	6.4	6.1	5.7	5.3	5.0	5.1	4.9	6.4	7.8	9.3	10.1	10.7	11.1	11.2	11.4	11.0	10.8	9.4	7.6	6.5	7.0	6.7	6.9	7.0	7.9	7.9								
Bismarck, N. Dak.	12.1	11.5	12.7	12.0	11.2	11.1	10.9	11.0	11.9	11.1	11.6	13.5	13.6	15.9	17.0	16.6	15.6	14.4	12.9	11.2	11.0	11.0	13.1	13.1	13.1	13.1								
Block Island, R. I.	13.3	13.6	13.7	13.2	13.4	13.5	13.3	13.0	14.0	14.1	14.4	15.1	15.6	15.0	14.8	15.0	15.0	14.6	15.0	13.9	13.3	13.6	13.6	14.2	14.2	14.2	14.2							
Boston, Mass.	11.1	10.9	10.7	10.2	9.8	10.1	10.2	11.0	11.6	12.0	12.5	13.4	14.2	14.5	14.8	14.5	12.6	12.4	11.7	12.3	11.5	11.1	11.1	12.0	12.0	12.0								
Buffalo, N. Y.	11.8	11.1	11.6	12.3	12.7	12.5	12.8	12.8	13.8	14.6	15.0	14.6	14.7	14.7	14.3	13.7	13.2	13.1	12.1	11.2	11.6	11.6	11.8	13.0	13.0	13.0								
Cairo, Ill.	10.5	10.8	10.5	10.4	9.8	10.0	10.1	10.4	10.6	11.0	12.0	12.9	13.3	13.5	13.2	12.6	11.5	10.3	10.1	9.9	9.8	9.9	10.1	11.1	11.1	11.1								
Cape Henry, Va.	11.3	11.9	10.9	10.7	10.3	10.8	11.2	10.8	11.8	12.4	13.0	12.8	12.0	12.7	12.2	11.8	10.9	9.4	10.6	11.4	12.9	12.5	12.7	11.6	11.6	11.6								
Charleston, S. C.	6.5	7.2	6.7	6.5	6.3	6.1	6.0	5.9	7.0	7.5	8.3	8.9	10.3	10.8	11.4	11.3	11.2	10.1	8.3	7.7	6.8	6.3	6.8	6.9	7.9	7.9	7.9							
Charlotte, N. C.	7.4	6.7	6.6	6.7	6.3	6.2	6.2	5.7	6.8	9.3	10.0	10.1	10.7	10.6	9.2	7.4	7.1	7.5	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1							
Chattanooga, Tenn.	6.2	6.7	6.6	6.3	6.6	6.1	5.6	5.6	6.5	6.8	8.2	8.9	9.3	10.2	11.1	11.1	11.1	9.3	8.6	8.2	7.0	6.7	6.4	7.9	7.9	7.9	7.9							
Cheyenne, Wyo.	11.0	11.1	11.9	12.3	11.3	11.6	12.4	12.8	14.0	13.6	15.9	18.4	20.1	20.0	21.3	20.9	20.9	21.0	17.5	13.6	12.6	11.6	11.7	15.3	15.3	15.3	15.3							
Chicago, Ill.	21.2	21.0	21.5	21.2	21.0	20.9	20.7	20.3	21.2	21.0	21.8	22.6	24.0	23.6	24.4	24.5	24.5	22.2	21.8	21.1	21.1	21.1	22.0	22.2	22.2	22.2	22.2							
Cincinnati, Ohio	6.1	6.0	6.3	6.5	6.9	6.5	6.1	7.1	8.3	8.8	9.5	9.7	10.9	11.1	11.7	11.2	10.5	9.0	7.7	7.4	7.0	7.0	6.4	8.3	8.3	8.3	8.3							
Cleveland, Ohio	13.3	13.1	12.8	14.4	15.1	13.8	13.6	14.7	15.7	16.6	17.8	18.4	17.5	17.9	16.8	16.2	14.7	13.3	12.4	12.6	13.6	13.7	14.1	15.0	15.0	15.0	15.0							
Colorado Sprgs., Colo.	9.6	9.6	10.5	10.7	10.5	9.7	9.3	9.5	10.1	10.1	12.1	14.5	15.0	16.7	16.6	17.6	17.2	14.5	11.7	10.8	10.4	9.8	12.2	12.2	12.2	12.2	12.2							
Columbia, Mo.	9.3	8.9	8.2	7.9	8.1	7.6	7.3	8.3	9.8	11.3	12.6	13.2	13.1	12.7	11.4	9.9	8.5	8.4	8.6	9.3	9.6	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1					
Columbus, Ohio	9.4	10.0	9.8	10.2	10.1	10.0	10.2	10.5	11.2	12.7	13.2	14.2	15.3	15.2	14.8	13.4	12.4	11.5	10.9	10.7	10.2	10.8	10.3	11.7	11.7	11.7	11.7	11.7						
Concordia, Kans.	9.4	10.0	8.9	9.2	10.0	9.8	9.8	10.3	12.2	13.1	14.0	14.3	14.6	14.9	14.4	13.3	11.6	10.1	8.5	8.5	11.7	11.9	12.4	12.4	12.4	12.4	12.4	12.4						
Corpus Christi, Tex.	12.8	12.6	12.5	12.1	12.1	12.3	12.1	12.4	13.2	14.0	14.0	14.1	14.1	14.7	15.0	15.0	15.5	16.4	16.5	14.8	13.6	14.5	14.5	14.5	14.5	14.5	14.5	14.5						
Davenport, Iowa	11.1	10.5	10.2	9.2	9.6	9.8	10.1	10.5	10.5	12.3	13.2	14.8	14.9	15.5	16.2	15.6	15.4	14.1	12.3	13.2	12.5	11.6	11.8	12.5	12.5	12.5	12.5	12.5	12.5					
Denver, Colo.	8.3	7.2	6.7	7.9	7.5	7.2	7.6	7.9	7.7	7.5	7.3	7.8	8.8	10.6	11.0	10.2	11.1	11.4	11.2	10.4	9.9	9.1	8.0	7.2	8.7	8.7	8.7	8.7	8.7					
Des Moines, Iowa	9.4	8.4	8.2	7.5	8.1	8.0	8.2	7.8	9.6	11.3	13.5	14.4	14.4	15.1	15.6	15.5	15.5	15.3	14.8	14.0	10.8	9.0	9.1	9.1	11.0	11.0	11.0	11.0	11.0					
Detroit, Mich.	12.1	12.1	12.8	12.5	12.4	12.7	12.0	12.8	13.7	14.3	14.8	15.7	15.9	17.1	16.9	16.4	15.6	14.2	12.3	12.3	12.6	12.9	12.2	13.7	13.7	13.7	13.7	13.7						
Dodge City, Kans.	11.7	11.8	11.9	11.3	11.0	10.8	10.5	10.7	11.3	14.6	18.2	18.5	18.4	17.6	17.6	17.6	17.7	15.5	12.8	12.4	11.6	11.7	14.3	14.3	14.3	14.3	14.3	14.3						
Dubuque, Iowa	6.3	6.1	6.5	6.0	5.4	5.2	5.4	6.4	7.3	8.3	8.7	9.4	10.3	9.9	9.9	9.9	9.2	8.1	6.9	6.4	6.1	6.6	6.6	7.4	7.4	7.4	7.4	7.4	7.4					
Duluth, Minn.	6.7	7.0	6.6	6.8	6.5	6.2	6.4	7.3	8.0	7.5	8.0	9.0	9.5	9.3	9.2	9.1	8.1	7.4	7.0	7.5	7.4	7.4	7.6	7.6	7.6	7.6	7.6	7.6						
Eastport, Me.	8.9	8.8	8.8	9.2	9.2	9.8	9.9	11.1	12.2	13.4	14.0	14.0	14.7	15.3	15.2	14.8	15.5	15.4	15.0	15.5	15.0	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5					
El Paso, Tex.	11.8	11.4	11.1	10.7	10.5	10.7	10.0	9.9	10.2	9.9	10.5	11.4	13.1	14.5	14.8	15.4	15.6	15.0	14.5	12.1	12.1	12.1	12.2	12.2	12.2	12.2	12.2	12.2	12.2					
Erie, Pa.	12.0	12.6	12.0	12.0	12.2	12.7	13.3	13.8	13.7	14.4	14.5	14.7	15.0	15.0	14.7	14.3	13.7	12.5	10.3	10.4	10.4	11.9	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6				
Eureka, Cal.	6.4	6.3	5.7	6.2	6.2	6.5	5.9	5.8	6.2	5.0	5.2	5.5	6.2	7.7	9.2	10.0	10.7	9.9	9.7	8.9	7.8	8.3	6.9	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4			
Fort Canby, Wash.	17.0	16.2	15.4	15.7	16.0	18.4	17.6	17.1	17.8	16.9	16.0	16.5	16.6	16.6	17.0	16.3	15.7	15.2	15.2	15.4	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6			
Fort Smith, Ark.	7.7	8.7	8.6	7.7	7.7	7.1	7.7	8.0	8.1	9.1	9.0	9.3	9.1	9.7	9.8	10.1	10.5	10.6	10.4	10.5	10.4	10.4	10.4	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	
Fresno, Cal.	7.1	7.1	7.0	6.8	6.7	6.6	6.3	6.5	5.6	5.5	5.2	6.1	6.8	7.5	7.2	7.0	7.7	8.9	8.8	8.5	8.5	7.6	7.6	7.6	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Galveston, Tex.	13.5	13.1	12.7	12.4	12.8	12.5	12.5	12.7	12.5	12.9	13.0	13.3	13.2	13.3	13.5	13.1	13.0	13.5	13.5	13.5	13.0	13.2	14.5</											

TABLE VII.—*Average wind movement, etc.—Continued.*

Stations.	Wind Movement.												Wind Movement.													
	1 s. m.	2 s. m.	3 s. m.	4 s. m.	5 s. m.	6 s. m.	7 s. m.	8 s. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.	
Oklahoma, Okla.....	10.5	10.1	10.2	10.6	10.1	9.9	10.1	10.2	10.9	12.3	13.8	14.0	14.0	14.2	15.2	15.7	14.8	13.5	11.1	10.6	10.1	11.2	10.8	12.0		
Olympia, Wash.....	4.7	5.0	5.2	5.4	5.1	5.4	5.1	5.4	5.5	5.7	5.9	6.9	6.9	8.1	8.2	8.6	8.9	7.7	6.8	5.4	5.2	4.7	6.3	6.3		
Omaha, Nebr.....	8.4	8.4	8.0	7.9	8.4	9.1	9.1	9.1	10.1	10.9	12.3	13.3	13.9	13.7	14.1	14.3	13.4	12.5	10.6	9.0	8.2	7.5	10.3	10.3		
Oswego, N. Y.....	12.4	12.4	12.6	12.8	12.2	12.4	11.9	13.5	14.0	14.9	14.8	14.3	14.6	13.8	13.5	12.5	12.0	12.9	12.7	12.8	12.3	13.5	13.3			
Palestine, Tex.....	7.6	7.0	7.0	7.3	6.8	6.9	7.2	7.4	8.2	8.8	9.0	9.0	9.0	9.3	9.2	9.2	8.9	8.5	7.8	7.0	7.9	8.4	9.2	8.2		
Parkersburg, W. Va.....	4.5	4.7	4.7	4.9	4.6	4.5	4.4	5.0	6.0	7.7	8.8	9.2	9.5	9.2	9.4	8.9	8.5	6.8	5.1	5.7	4.7	4.3	4.8	6.3		
Pensacola, Fla.....	10.5	10.1	9.8	9.1	9.2	10.1	10.1	10.9	10.7	11.3	11.7	11.9	12.1	12.3	11.5	11.3	10.3	9.6	9.1	9.5	10.0	10.3	10.6			
Philadelphia, Pa.....	9.7	9.1	8.5	8.3	8.4	8.5	8.7	8.6	9.3	10.7	11.7	12.0	12.2	12.9	13.2	12.9	11.2	10.7	10.2	9.7	9.3	9.3	9.4	10.2		
Pierre, S. Dak.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Pikes Peak, Colo.....	37.7	37.7	38.2	40.0	40.5	40.1	38.1	38.3	40.9	39.6	37.1	34.4	31.5	27.8	26.7	26.2	25.9	26.5	29.4	30.5	32.1	35.0	37.5	38.5	34.6	
Pittsburg, Pa.....	6.6	6.1	6.1	6.2	5.9	6.0	5.9	6.1	6.4	7.9	8.8	9.1	9.7	9.5	9.9	9.6	9.9	9.1	7.8	6.2	6.7	6.8	7.2	7.3	7.5	
Port Angeles, Wash.....	5.4	4.8	4.4	4.4	4.5	4.3	4.2	4.7	4.2	4.7	3.9	3.2	3.8	4.4	5.3	5.5	5.6	6.1	6.2	5.7	4.9	5.9	5.2	4.9		
Port Huron, Mich.....	12.3	13.1	13.2	12.6	12.1	12.7	13.0	13.4	14.3	15.2	15.8	16.1	16.5	17.3	16.5	15.5	14.6	13.2	12.2	12.1	12.6	12.7	14.0			
Portland, Me.....	6.5	6.1	6.0	6.5	6.6	6.8	6.6	7.1	8.5	8.7	9.0	9.0	9.6	9.0	9.5	8.2	7.4	6.9	6.2	6.0	6.5	7.7	7.5			
Portland, Oreg.....	9.7	8.9	8.8	9.2	10.5	9.3	9.0	9.2	8.7	9.3	9.4	9.6	10.9	11.1	11.3	11.2	10.9	11.3	10.3	9.3	8.9	9.0	9.8			
Pueblo, Colo.....	8.2	8.6	9.0	8.3	7.5	6.9	7.7	7.7	8.4	9.6	10.5	11.3	13.1	14.4	14.3	14.0	12.8	11.4	10.7	10.1	10.1	8.5	10.0			
Raleigh, N.C.....	5.6	5.8	5.8	5.5	5.5	5.5	5.0	5.9	7.0	7.8	8.5	8.4	8.8	9.4	9.0	8.9	8.4	7.5	7.0	6.0	6.2	6.3	6.3	7.8		
Rapid City, S. Dak.....	10.6	10.0	9.7	10.3	11.2	10.5	10.1	10.3	10.6	11.3	11.4	12.9	13.2	14.3	15.4	17.5	16.6	16.4	14.6	14.0	12.0	11.8	12.1	12.5		
Red Bluff, Cal.....	6.3	5.8	6.3	6.4	6.4	6.3	6.4	6.2	6.3	6.5	7.4	8.3	8.7	8.8	9.0	9.4	9.5	9.1	8.0	6.9	6.5	6.0	7.5	7.5		
Rochester, N. Y.....	7.6	7.6	7.4	7.6	8.0	7.9	8.3	9.3	10.9	11.6	12.1	12.4	12.7	12.5	12.2	11.3	10.2	10.0	9.9	8.8	9.2	7.9	7.8	9.6		
Roseburg, Oreg.....	3.0	3.4	3.5	3.5	3.3	2.9	2.8	2.8	3.2	3.4	3.4	3.5	4.2	4.9	5.6	5.9	6.9	7.2	7.6	7.5	6.1	4.7	3.4	3.0	4.4	
Sacramento, Cal.....	6.2	6.1	6.2	5.5	6.0	6.4	7.0	7.3	7.1	7.8	8.5	8.4	8.9	9.0	10.3	10.5	10.4	10.2	9.9	9.3	8.1	7.2	6.3	6.3	7.8	
St. Louis, Mo.....	12.6	12.1	11.8	12.2	12.0	11.8	12.0	13.5	14.4	15.0	14.0	14.8	15.8	16.0	16.6	17.2	16.1	14.2	13.0	12.7	12.4	12.6	13.7	12.6		
St. Paul, Minn.....	9.7	8.7	7.6	8.3	7.8	7.9	8.5	8.7	8.9	9.0	10.5	11.9	12.3	11.9	11.7	12.5	12.6	11.9	10.9	9.5	9.6	9.9	10.1			
St. Vincent, Minn.....	9.5	9.4	9.7	9.3	9.3	9.4	9.5	10.3	10.4	11.3	13.2	13.4	13.7	13.8	13.5	13.5	11.9	11.0	10.4	10.5	10.7	10.5	11.3			
Salt Lake City, Utah.....	6.2	6.6	6.7	7.0	6.4	6.0	5.5	4.6	4.2	4.5	5.1	5.8	8.2	9.7	10.3	10.5	9.8	10.9	9.3	8.6	5.4	6.3	7.1			
San Antonio, Tex.....	9.1	8.3	8.0	8.2	7.3	7.2	7.4	6.8	7.0	8.1	10.1	10.7	10.3	10.3	10.7	11.4	11.7	11.6	11.1	11.5	10.2	10.5	10.8			
San Diego, Cal.....	4.9	4.7	4.6	4.5	4.4	4.3	4.5	4.6	4.5	4.4	4.1	4.2	5.4	6.6	6.1	8.1	9.5	9.9	8.0	6.5	5.1	4.4	5.8	5.8		
Sandusky, Ohio.....	9.3	9.1	9.4	10.2	10.0	9.6	10.5	10.2	11.4	11.5	11.9	12.9	12.5	12.6	12.4	12.1	10.5	9.9	9.3	9.9	9.5	10.6				
San Francisco, Cal.....	9.8	9.5	8.5	8.2	7.6	7.6	7.5	7.7	6.9	6.6	7.4	8.5	9.1	9.5	10.7	13.7	15.5	17.0	17.8	16.3	15.6	14.4	12.1	11.0		
Santa Fe, N. Mex.....	5.9	5.5	5.4	4.5	4.3	3.9	4.5	5.1	5.5	6.1	8.0	9.9	11.2	11.9	12.2	13.0	12.8	12.1	12.0	11.1	7.7	6.7	6.6	8.0		
Sainte-Sabine, Mich.....	7.5	7.5	7.5	7.9	8.4	8.4	9.0	10.0	11.1	11.4	12.3	13.5	13.6	13.2	12.9	12.8	12.1	11.2	10.6	9.1	8.4	8.3	8.5	10.1		
Savannah, Ga.....	8.1	8.1	7.1	6.5	6.8	6.7	6.7	7.1	7.4	8.3	8.9	9.5	9.5	10.2	11.2	10.7	11.2	10.9	9.9	8.8	8.5	9.3	9.0			
Seattle, Wash.....	6.2	6.3	7.2	7.8	7.8	7.5	7.5	7.2	7.2	7.7	7.5	7.9	8.2	8.2	8.5	8.8	9.4	10.4	9.7	9.0	7.2	6.9	8.0			
Shreveport, La.....	9.6	8.7	7.8	8.2	8.3	8.4	8.5	8.9	8.7	9.5	9.3	9.8	9.3	9.8	10.0	10.5	9.9	9.3	8.8	8.4	10.0	10.3	9.1			
Sioux City, Iowa.....	11.2	11.3	11.1	11.2	11.3	12.2	11.7	12.5	13.1	15.0	16.7	18.0	19.3	19.8	19.6	20.2	19.4	18.0	15.0	12.3	11.0	10.5	10.8	14.3		
Southport, N. C.....	7.3	8.0	8.0	7.8	8.1	8.0	8.5	9.2	9.3	10.1	10.9	11.0	11.0	12.0	12.3	12.3	12.4	12.3	10.7	9.3	8.7	8.3	7.4	9.5		
Spokane, Wash.....	7.2	7.4	7.7	7.5	7.5	7.4	6.7	6.5	6.4	5.9	6.1	6.5	7.7	8.2	9.3	9.5	8.9	8.1	7.7	7.8	7.3	7.5	7.6			
Springfield, Ill.....	10.6	10.2	10.5	10.4	10.5	10.6	10.3	10.4	11.7	12.8	13.4	14.7	15.3	15.5	15.6	15.5	15.5	14.1	12.4	11.1	10.9	11.4	12.3			
Springfield, Mo.....	10.4	11.0	11.0	10.6	10.7	10.5	10.3	11.3	12.3	14.4	14.8	13.8	14.8	14.8	14.5	14.3	15.0	14.3	11.9	11.5	10.8	11.2	11.7			
Tampa, Fla.....	5.0	4.9	4.4	4.4	4.9	4.9	5.4	5.2	6.5	8.3	8.5	8.3	8.6	8.5	8.7	9.6	9.9	9.6	7.6	5.9	4.9	4.5	5.0	4.7	6.6	
Tatooch Island, Wash.....	16.4	17.0	16.3	17.8	16.9	15.4	15.1	15.7	16.1	16.4	17.2	18.6	18.0	18.7	17.5	18.1	17.4	17.0	16.4	15.2	15.9	16.4	16.3	16.7		
Titusville, Fla.....	11.8	10.9	9.3	9.2	9.3	8.8	9.2	9.0	10.6	12.6	14.5	15.6	16.4	16.7	18.3	18.7	19.4	19.1	17.4	16.0	13.3	12.7	11.8	13.5		
Toledo, Ohio.....	11.0	10.7	10.8	11.2	11.2	11.0	11.0	11.9	12.7	14.4	14.1	15.4	14.9	15.1	14.9	15.6	14.3	14.2	12.4	11.1	10.9	11.7	12.6			
Tucson, Ariz.....	7.8	7.1	6.8	6.9	6.9	7.5	7.9	7.4	8.4	9.3	9.3	7.4	8.4	8.1	9.2	10.5	11.1	10.8	9.7	8.1	7.9	7.9	8.3			
Valentine, Nebr.....	12.2	12.5	12.5	11.9	12.6	11.7	11.8	11.8	12.0	12.7	15.0	16.1	16.4	16.2	16.4	16.3	16.2	16.8	16.6	14.7	12.8	11.5	12.1	13.8		
Vicksburg, Miss.....	9.3	9.5	9.0	9.1	8.1	7.8	7.3	8.1	7.8	8.4	8.9	9.3	9.9	9.9	9.6	10.2	9.9	9.5	9.2	8.7	10.1	9.2	9.2			
Vineyard Haven, Mass.....	8.8	8.5	9.0	9.0	8.9	8.5	8.5	8.7	9.0	9.6	10.4															

TABLE VIII.—*Prevailing and resultant winds from self-registers for March, 1894.*

Number.	Station.	Prevailing wind.		Total movement.		Resultant direction.		Resultant movement.		Azimuth of movement minus direction.	Ratio of resultant movement to total movement.		
		Direction from.	Duration.	Monthly.	Hourly average.	Direction from.	Duration.	Average hourly velocity.	Direction from.				
1	Eastport, Me.	(1)	(2)	(3) Hours.	(4) Miles.	(5) Miles.	(6)	(7) Hours.	(8) Miles.	(9)	(10) Miles.	(11) °	(12)
2	Portland, Me.	sw.	162	8,173	11.0	s. 88 w.	220	11.1	n. 83 w.	2,452	+ 9	0.300	
4	Boston, Mass.	s.	204	5,699	7.7	s. 60 w.	238	8.2	s. 54 w.	1,958	- 1	0.344	
5	Nantucket, Mass.	w.	179	9,904	12.0	s. 66 w.	280	15.2	s. 75 w.	4,346	+ 9	0.485	
6	New Haven, Conn.	n.	162	8,778	11.8	n. 55 w.	230	12.4	n. 46 w.	2,843	+ 7	0.324	
7		s.	140	6,209	8.3	n. 85 w.	101	15.6	n. 72 w.	1,577	+ 13	0.254	
10	Albany, N. Y.	s.	237	6,764	9.1	s. 56 w.	198	9.7	s. 46 w.	1,918	- 10	0.284	
11	New York, N. Y.	nw.	193	7,745	10.4	n. 70 w.	134	18.9	n. 79 w.	2,524	- 9	0.326	
13	Philadelphia, Pa.	nw.	167	7,620	10.2	n. 63 w.	145	16.0	n. 62 w.	2,315	+ 1	0.304	
15	Baltimore, Md.	nw.	157	5,872	7.9	s. 89 w.	85	23.9	n. 76 w.	2,025	+ 15	0.345	
16	Washington, D. C.	nw.	185	5,504	7.4	s. 84 w.	92	17.9	n. 77 w.	1,650	+ 19	0.300	
17	Lynchburg, Va.	nw.	198	3,657	4.9	s. 85 w.	174	8.0	n. 80 w.	1,399	+ 15	0.382	
18	Norfolk, Va.	n.	157	6,028	8.1	n. 65 e.	132	1.1	s. 68 e.	148	- 47	0.024	
24	Wilmington, N. C.	sw.	204	6,586	8.9	s. 52 w.	129	14.7	s. 57 w.	1,877	+ 5	0.285	
26	Augusta, Ga.	nw.	155	4,474	6.0	s. 55 w.	143	9.1	s. 62 w.	1,361	+ 4	0.304	
27	Savannah, Ga.	s.	271	6,488	8.7	s. 20 w.	221	8.8	s. 28 w.	1,956	+ 3	0.301	
28	Jacksonville, Fla.	s.	206	5,512	7.4	s. 21 e.	170	9.2	s. 12 e.	1,557	+ 9	0.282	
30	Key West, Fla.	e.	280	7,857	10.6	n. 88 e.	433	10.9	n. 81 e.	4,707	- 7	0.599	
33	Atlanta, Ga.	nw.	191	7,574	10.2	s. 54 w.	238	11.2	s. 60 w.	2,975	+ 6	0.353	
35	Vicksburg, Miss.	se.	210	6,809	9.2	s. 35 e.	244	11.0	s. 29 e.	2,692	+ 6	0.395	
39	New Orleans, La.	se.	273	7,778	10.5	s. 57 e.	332	10.7	s. 60 e.	3,560	- 3	0.458	
42	Little Rock, Ark.	s.	189	6,644	8.9	s. o w.	167	6.5	s. 2 w.	1,090	+ 2	0.164	
44	Galveston, Tex.	se.	307	9,660	13.0	s. 46 e.	386	10.9	s. 55 e.	4,223	- 10	0.436	
48	Knoxville, Tenn.	sw.	271	3,977	5.3	s. 78 w.	285	7.5	s. 67 w.	2,130	- 11	0.536	
49	Memphis, Tenn.	se.	208	6,742	9.1	s. 17 e.	240	9.4	s. 23 e.	2,268	- 5	0.436	
50	Nashville, Tenn.	se.	222	5,440	7.3	s. 20 e.	177	8.0	s. 8 w.	1,415	+ 28	0.200	
52	Louisville, Ky.	s.	188	7,205	9.7	s. 8 w.	252	11.3	s. 22 w.	2,856	+ 14	0.397	
53	Indianapolis, Ind.	se.	191	6,064	8.2	s. 26 w.	245	8.6	s. 24 w.	2,112	- 2	0.348	
54	Cincinnati, Ohio.	se.	188	6,144	8.3	s. 20 w.	235	7.4	s. 34 w.	1,731	+ 14	0.282	
55	Columbus, Ohio.	nw.	176	8,739	11.7	s. 56 w.	262	14.5	s. 70 w.	3,803	+ 14	0.435	
56	Pittsburg, Pa.	nw.	200	5,607	7.5	s. 71 w.	247	9.8	s. 77 w.	2,427	+ 6	0.433	
58	Buffalo, N. Y.	sw.	199	9,685	13.0	s. 82 w.	285	19.4	s. 86 w.	5,515	+ 4	0.569	
60	Rochester, N. Y.	sw.	318	7,123	9.6	n. 48 w.	321	12.9	s. 57 w.	4,153	+ 9	0.583	
62	Cleveland, Ohio.	se.	245	11,144	15.0	s. 5 w.	222	18.8	s. 17 w.	4,169	+ 12	0.374	
64	Toledo, Ohio.	sw.	173	9,351	12.6	s. 65 w.	274	14.6	s. 68 w.	3,988	+ 3	0.426	
65	Detroit, Mich.	sw.	267	10,192	13.7	s. 62 w.	327	17.4	s. 65 w.	5,074	+ 3	0.556	
66	Alpena, Mich.	se.	168	9,130	12.3	s. 47 w.	161	12.6	s. 60 w.	2,034	+ 13	0.223	
67	Grand Haven, Mich.	sw.	160	10,236	13.8	s. 44 w.	189	19.4	s. 36 w.	3,664	- 8	0.358	
68	Marquette, Mich.	nw.	172	8,973	12.1	n. 76 w.	124	18.9	s. 80 w.	2,341	- 24	0.201	
70	Sault Ste. Marie, Mich.	se.	301	7,500	10.1	s. 28 e.	90	3.3	s. 38 w.	293	+ 66	0.039	
71	Chicago, Ill.	sw.	198	16,485	22.2	s. 54 w.	255	26.6	s. 46 w.	6,772	- 8	0.411	
72	Milwaukee, Wis.	sw.	154	9,406	12.6	s. 47 w.	195	15.2	s. 56 w.	2,968	+ 9	0.316	
74	Duluth, Minn.	ne.	175	5,634	7.6	n. 11 e.	191	10.4	n. 4 e.	1,982	- 7	0.352	
75	Moorhead, Minn.	nw.	198	9,668	12.9	n. 64 w.	166	10.5	n. 42 w.	1,741	+ 22	0.181	
77	Bismarck, N. Dak.	nw.	311	9,716	13.1	n. 39 w.	256	11.6	n. 4 w.	2,964	+ 35	0.305	
79	Saint Paul, Minn.	se.	246	7,526	10.1	s. 13 w.	143	9.3	s. 53 w.	1,324	+ 40	0.176	
81	Davenport, Iowa.	sw.	203	9,320	12.5	s. 42 w.	234	13.3	s. 51 w.	3,788	+ 9	0.406	
82	Des Moines, Iowa.	sw.	196	8,209	11.0	s. 74 w.	233	13.8	s. 67 w.	3,207	- 7	0.391	
88	Saint Louis, Mo.	se.	190	10,158	13.7	s. 22 w.	254	15.4	s. 22 w.	3,916	0	0.385	
90	Kansas City, Mo.	sw.	183	9,125	12.3	s. 65 w.	132	15.9	s. 68 w.	2,505	+ 3	0.274	
92	Omaha, Nebr.	nw.	221	7,666	10.3	s. 69 w.	135	11.8	s. 47 w.	1,599	- 22	0.209	
96	Huron, S. Dak.	nw.	247	11,716	15.7	n. 59 w.	149	15.8	n. 51 w.	2,353	+ 8	0.201	
98	Havre, Mont.	sw.	254	7,737	10.4	n. 86 w.	292	14.3	s. 81 w.	4,183	- 13	0.539	
100	Helena, Mont.	sw.	363	6,888	9.3	s. 60 w.	453	10.1	s. 58 w.	4,574	- 2	0.604	
105	Colorado Springs, Colo.	n.	255	9,063	12.2	n. 10 e.	142	15.4	n. 21 w.	2,183	- 31	0.241	
107	Denver, Colo.	sw.	154	6,491	8.7	s. 54 w.	129	8.8	n. 83 w.	880	+ 43	0.136	
108	Pikes Peak, Colo.	w.	274	25,733	34.6	n. 84 w.	426	42.5	n. 87 w.	18,102	- 3	0.704	
111	Dodge City, Kans.	se.	180	10,641	14.3	s. 80 e.	102	16.9	s. 27 e.	1,725	+ 53	0.162	
114	Abilene, Tex.	se.	161	9,348	12.6	s. 3 e.	147	17.9	s. 7 e.	2,631	- 4	0.281	
116	El Paso, Tex.	nw.	317	9,243	12.4	n. 60 w.	354	15.8	n. 62 w.	5,605	- 2	0.606	
117	Santa Fe, N. Mex.	sw.	199	5,901	8.0	s. 74 w.	82	19.0	s. 84 w.	1,561	+ 10	0.262	
119	Yuma, Ariz.	w.	144	5,738	7.7	n. 81 w.	154	10.9	n. 83 w.	1,676	- 2	0.292	
120	Keeler, Cal.	e.	142	6,367	8.6	n. 15 w.	20	76.8	n. 52 w.	1,537	- 37	0.241	
122	Salt Lake City, Utah.	nw.	173	5,273	7.1	s. 30 w.	80	14.0	s. 38 w.	1,118	+ 8	0.212	
125	Spokane, Wash.	sw.	240	5,683	7.6	s. 1 w.	377	9.8	s. 11 w.	3,083	+ 10	0.648	
130	Seattle, Wash.	s.	200	5,922	8.0	s. 42 e.	298	11.3	s. 33 e.	3,376	+ 9	0.570	
132	Portland, Oregon.	sw.	200	7,305	9.8	s. 46 w.	255	15.7	s. 41 w.	4,008	- 5	0.549	
133	Roseburg, Oregon.	sw.	134	3,270	4.4	s. 29 w.	137	9.2	s. 31 w.	1,258	+ 2	0.385	
137	San Francisco, Cal.	sw.	425	8,215	11.0	s. 53 w.	386	15.7	s. 53 w.	6,059	0	0.738	
140	San Diego, Cal.	w.	180	4,335	5.8	n. 79 w.	237	8.6	n. 84 w.	2,042	- 5	0.471	

TABLE IX.—Resultant winds from observations at 8 a. m. and 8 p. m., daily, during March, 1894.

Number.	Station.	Component direction from—				Resultant.		Number.	Station.	Component direction from—				Resultant.	
		N.	S.	E.	W.	Direction from—	Duration.			N.	S.	E.	W.	Direction from—	Duration.
1	New England.	Hours.	Hours.	Hours.	Hours.	o	Hours.	73	Upper Lake Region—Cont'd.	Hours.	Hours.	Hours.	o	Hours.	Hours.
2	Eastport, Me.	21	19	8	25	n. 83 w.	17	73	Green Bay, Wis.	18	24	9	22	s. 65 w.	14
3	Portland, Me.	17	27	6	23	s. 60 w.	20	74	Duluth, Minn.	23	8	23	21	n. 8 e.	15
4	Northfield, Vt.	23	32	4	9	s. 29 w.	10		North Dakota.	26	16	10	23	n. 52 w.	16
5	Boston, Mass.	12	19	11	34	s. 73 w.	24	75	Moorhead, Minn.	27	12	11	17	n. 22 w.	16
6	Nantucket, Mass.	26	15	11	24	n. 50 w.	17	76	Saint Vincent, Minn.	28	13	13	25	n. 39 w.	19
7	Woods Hole, Mass.	9	14	5	15	s. 63 w.	11	77	Bismarck, N. Dak.						
8	Block Island, R. I.	19	22	11	31	s. 81 w.	20	78	Williston, N. Dak.						
9	New Haven, Conn.	23	18	16	19	n. 31 w.	6		Upper Mississippi Valley.						
10	New London, Conn.	17	21	12	26	s. 74 w.	15	79	Saint Paul, Minn.	12	24	21	24	s. 14 w.	12
11	Middle Atlantic States.							80	La Crosse, Wis.	17	26	11	15	s. 24 w.	10
12	Albany, N. Y.	16	28	7	23	s. 53 w.	20	81	Davenport, Iowa.	10	24	10	20	n. 30 w.	17
13	New York, N. Y.	23	21	14	24	n. 79 w.	10	82	Des Moines, Iowa.	20	20	10	26	.. . w.	16
14	Harrisburg, Pa.	18	13	19	23	n. 39 w.	6	83	Dubuque, Iowa.	10	23	17	24	s. 28 w.	15
15	Philadelphia, Pa.	19	20	16	23	s. 82 w.	7	84	Keokuk, Iowa.	10	29	11	26	s. 38 w.	24
16	Atlantic City, N. J.	17	17	16	23	.. . w.	7	85	Cairo, Ill.	17	34	15	12	s. 10 e.	17
17	Baltimore, Md.	17	21	14	23	s. 66 w.	9	86	Springfield, Ill.	16	30	7	22	s. 47 w.	20
18	Washington, D. C.	25	20	16	19	n. 31 w.	6	87	Hannibal, Mo.	14	22	14	25	s. 54 w.	14
19	Lynchburg, Va.	21	22	11	24	s. 86 w.	13	88	Saint Louis, Mo.	10	27	19	22	s. 10 w.	17
20	Norfolk, Va.	22	19	24	11	n. 77 e.	13		Missouri Valley.						
21	South Atlantic States.							89	Columbia, Mo.	7	14	11	11	.. . s.	7
22	Charlotte, N. C.	9	32	16	20	s. 10 w.	23	90	Kansas City, Mo.	20	24	9	24	s. 75 w.	16
23	Hatteras, N. C.	26	16	14	20	n. 31 w.	12	91	Springfield, Mo.	13	29	19	12	s. 24 e.	18
24	Kittyhawk, N. C.	23	20	14	17	n. 45 w.	4	92	Omaha, Nebr.	18	22	14	25	s. 70 w.	12
25	Raleigh, N. C.	18	25	13	21	s. 49 w.	11	93	Valentine, Nebr.	25	16	6	25	n. 65 w.	21
26	Southport, N. C.	17	19	10	28	s. 84 w.	18	94	Sioux City, Iowa.	22	21	12	21	s. 84 w.	9
27	Wilmington, N. C.	17	28	14	18	s. 20 w.	12	95	Pierre, S. Dak.	23	15	17	23	s. 37 w.	10
28	Charleston, S. C.	14	27	11	24	s. 45 w.	18	96	Huron, S. Dak.	25	10	13	25	s. 53 w.	15
29	Augusta, Ga.	16	23	15	25	s. 55 w.	12		Northern Slope.						
30	Batavias, Ga.	16	33	9	15	s. 19 w.	18	98	Havre, Mont.	19	17	8	33	s. 85 w.	25
31	Jacksonville, Fla.	17	26	20	13	s. 38 e.	11	99	Miles City, Mont.	18	22	10	27	s. 77 w.	18
32	Florida Peninsula.							100	Helena, Mont.	9	28	2	40	s. 63 w.	42
33	Jupiter, Fla.	15	24	21	16	s. 29 e.	10	101	Rapid City, S. Dak.	26	15	8	20	n. 47 w.	16
34	Key West, Fla.	13	11	43	3	n. 87 e.	40	102	Cheyenne, Wyo.	23	15	1	34	s. 76 w.	34
35	Tampa, Fla.	17	16	19	24	n. 79 w.	5	103	Lander, Wyo.	13	18	5	34	s. 80 w.	29
36	Titusville, Fla.	13	24	23	17	s. 29 e.	12	104	Kearney, Nebr.	20	18	11	21	n. 79 w.	10
37	Eastern Gulf States.							105	North Platte, Nebr.	18	23	9	25	s. 73 w.	17
38	Atlanta, Ga.	16	24	12	22	s. 51 w.	13		Middle Slope.						
39	Pensacola, Fla.	21	26	18	12	s. 50 e.	8	106	Colorado Springs, Colo.	32	16	10	10	.. . n.	16
40	Mobile, Ala.	21	29	13	9	s. 27 e.	9	107	Denver, Colo.	17	28	18	18	.. . s.	11
41	Montgomery, Ala.	15	24	16	17	s. 6 w.	9	108	Pikes Peak, Colo.	17	11	2	42	s. 81 w.	40
42	Meridian, Miss.	17	29	19	7	s. 45 e.	17	109	Pueblo, Colo.	10	12	21	26	s. 74 w.	7
43	Vicksburg, Miss.	13	31	27	8	s. 47 e.	26	110	Concordia, Kans.	21	25	9	15	s. 36 w.	7
44	New Orleans, La.	18	31	26	3	s. 61 e.	26	111	Dodge City, Kans.	14	25	19	9	s. 84 e.	10
45	Western Gulf States.							112	Wichita, Kans.	21	29	11	9	s. 14 e.	8
46	Shreveport, La.	14	35	21	8	s. 31 e.	25	113	Oklahoma, Okla.	22	29	16	10	s. 41 e.	9
47	Fort Smith, Ark.	16	14	34	8	n. 86 e.	26		Abilene, Tex.	20	29	15	9	s. 34 e.	11
48	Little Rock, Ark.	17	8	16	15	s. 5 e.	11	114	Amarillo, Tex.	18	30	8	16	s. 40 w.	16
49	Corpus Christi, Tex.	17	26	34	3	s. 74 e.	32	115	El Paso, Tex.	22	7	10	39	n. 62 w.	33
50	Galveston, Tex.	11	34	28	3	s. 47 e.	34		Santa Fe, N. Mex.	20	23	16	22	s. 63 w.	33
51	Palestine, Tex.	18	28	17	12	s. 27 e.	11	116	Tucson, Ariz.	13	28	17	21	s. 15 w.	16
52	San Antonio, Tex.	18	22	29	8	s. 79 e.	21	117	Yuma, Ariz.	27	15	11	23	n. 45 w.	17
53	Ohio Valley and Tennessee.	18	27	17	20	s. 18 w.	10	118	Keeler, Cal.	19	15	22	20	n. 27 e.	4
54	Knoxville, Tenn.	21	21	12	26	.. . w.	14	119	Middle Plateau.						
55	Memphis, Tenn.	16	30	21	13	s. 30 e.	16	120	Winnemucca, Nev.	11	25	9	35	s. 62 w.	30
56	Nashville, Tenn.	16	27	23	14	s. 39 e.	14	121	Salt Lake City, Utah.	18	20	17	23	s. 72 w.	6
57	Lexington, Ky.	18	26	12	29	s. 65 w.	19	122	Northern Plateau.						
58	Louisville, Ky.	13	29	18	19	s. 3 w.	16		Baker City, Oreg.	18	26	21	23	s. 14 w.	8
59	Indianapolis, Ind.	8	31	15	21	s. 15 w.	24	123	Idaho Falls, Idaho.	9	39	13	15	s. 4 w.	30
60	Cincinnati, Ohio.	11	27	19	22	s. 11 w.	16	124	Spokane, Wash.	4	33	17	20	s. 5 w.	34
61	Columbus, Ohio.	15	26	10	25	s. 56 w.	19	125	Walla Walla, Wash.	9	36	8	19	s. 22 w.	29
62	Pittsburg, Pa.	19	22	11	27	s. 79 w.	16	126	North Pacific Coast Region.						
63	Parkersburg, W. Va.	4	27	18	23	s. 12 w.	24	127	Fort Canby, Wash.	14	15	20	23	s. 72 w.	3
64	Lower Lake Region.							128	Olympia, Wash.	11	35	3	19	s. 34 w.	29
65	Upper Lake Region.							129	Port Angeles, Wash.	5	31	13	20	s. 15 w.	27
66	Buffalo, N. Y.	13	20	13	31	s. 69 w.	19	130	Seattle, Wash.	10	28	21	9	s. 34 e.	22
67	Oswego, N. Y.	11	31	15	18	s. 9 w.	20	131	Tatoosh Island, Wash.	3	19	25	25	.. . s.	16
68	Rochester, N. Y.	7	32	13	29	s. 33 w.	30	132	Portland, Oreg.	15	28	9	24	s. 49 w.	20
69	Erie, Pa.	12	27	8	27	s. 52 w.	24	133	Roseburg, Oreg.	13	21	22	22	s. 7 w.	8
70	Cleveland, Ohio.	11	27	22	20	s. 7 e.	16		Eureka, Cal.	23	26	8	17	s. 72 w.	10
71	Sandusky, Ohio.	10	26	11	22	s. 34 w.	19	134	Red Bluff, Cal.	18	24	14	27	s. 65 w.	14
72	Toledo, Ohio.	11	23	12	31	s. 58 w.	22	135	Sacramento, Cal.	16	32	8	22	s. 41 w.	21
73	Detroit, Mich.	11	23	12	34	s. 61 w.	25	136	San Francisco, Cal.	6	31	7	33	s. 51 w.	40
74	Alpena, Mich.	14	26	14	21	s. 30 w.	14	137	South Pacific Coast Region.						
75	Grand Haven, Mich.	16	24	15	20	s. 32 w.	9	138	Fresno, Cal.	33	6	11	34	n. 40 w.	36
76	Marquette, Mich.	20	20	14	23	.. . w.	9	139	Los Angeles, Cal.	18	10	17	30	n. 58 w.	15
77	Port Huron, Mich.	13	27	10	24	s. 45 w.	20	140	San Diego, Cal.	20	12	9	34	n. 72 w.	26
78	Sault Ste. Marie, Mich.	13	21	26	19	s. 41 e.	11								
79	Chicago, Ill.	14	27	11	27	s. 51 w.	21								
80	Milwaukee, Wis.	13	23	13	26	s. 52 w.	16								

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